A Non-Realist Translation of Plato's Theory of Forms into My Model

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February 10, 2026

Abstract

This paper presents a non-realist translation of Plato's Theory of Forms (ToF) into MM Metaphysical Framework (My Model), using MMToU (My Model's Theory of Universals) as the principal bridge. The translation is driven by a single fixed rule: for any predicate F, Form(F) = the interuniversal for F. Here an *interuniversal* is a stabilized, collective non-physical DS-structure (DS = Data System) consisting of aligned agent-owned universals plus the linking resources that coordinate and correct their use (language, pedagogy, standards, instruments, institutions, and error-correction pathways). This choice preserves ToF's functional core—one-over-many, participation, the knowledge/opinion contrast, dialectic as epistemic ascent, and the role of Forms as authoritative standards—without positing mind-independent abstract entities as the default reading.

To make the comparative commitments explicit, the paper uses a Type 1/2/3 taxonomy: Type 1 denotes clean translation into MM/MMToU without new postulates; Type 2 denotes compatible elaborations; Type 3 denotes realist overlays that conflict with MM's basic stance (e.g., mind-independent Forms, privileged God's-eye access). The paper argues that the mapping is Type 2 overall (minimal): most items admit a Type 1 translation under the fixed Form(F)=interuniversal rule, while only two items motivate limited Type 2 additions; Type 3 is treated as an optional overlay rather than an implicit assumption.

Special attention is given to mathematics (especially geometry) as a case of unusually tight stabilization, supported by historical evidence that foundational geometric concepts evolved through progressive idealization and axiomatization—i.e., as interuniversals. Finally, the Form of the Good is translated functionally via PISC (Principle of Increased Self-Control), MM's highest-order orienting principle for evaluating and prioritizing stabilizations by their contribution to increased predictive and practical control.

1. Introduction

Plato's Theory of Forms (ToF) is often read as the paradigm case of *metaphysical realism*: beyond the changing world of sensible particulars, there exists a realm of non-physical, unchanging, atemporal entities—the Forms—that ground knowledge and explain why many particulars count as "beautiful," "equal," or "just." That realist reading is historically influential and philosophically powerful. But it also raises a familiar problem for

comparative work: when we try to relate ToF to a modern framework, do we have only two options—either accept Plato's ontology or reject his theory?

This paper argues that a third option is available, and methodologically superior for the kind of comparative metaphysics pursued within MM (My Model) (Khachatryan, 2023). The central idea is to separate (i) *the functional roles* ToF assigns to Forms from (ii) *the ontological packaging* in which Plato expresses those roles. Plato's Forms are not introduced merely to populate a second realm. They do specific work: they ground stable standards of correct application, make knowledge possible (as opposed to mere opinion), guide dialectical inquiry, and explain why many instances fall under one predicate. Even if one declines to treat the "two worlds" picture as literal ontology, one can still ask: what MM internal structures could play those roles?

The translation proposed here uses MMToU (My Model's Theory of Universals) (Khachatryan, 2026). MMToU is part of MM's model-centric framework centered on DS (Data System)—the informationally understood universe—and on a minimal ontology that treats many traditional metaphysical claims as optional interpretive overlays rather than compulsory commitments. MMToU distinguishes:

- *particulars* (objects, events, processes, and relations as encountered in experience and practice),
- *universals* (agent-owned, revisable classificatory non-physical DS-structures used for prediction and action), and
- *interuniversals* (collective non-physical DS-structures that align and stabilize many agents' universals via shared resources such as language, pedagogy, standards, instruments, institutions, and correction pathways).

With these tools in hand, the paper fixes a non-realist default definition of the Form-term:

Form(F) = the interuniversal for F

This single rule is meant to be used consistently across the mapping. It does not deny that Plato often speaks as if Forms are mind-independent beings. Rather, it treats that stronger metaphysical picture as something to be assessed separately—explicitly and diagnostically—after we have first captured the functional roles ToF needs the Forms to play.

To keep that assessment disciplined, the paper uses a *Type 1/2/3* classification framework for mappings:

- Type 1 (clean mapping): the ToF claim can be translated into MM/MMToU without new postulates.
- Type 2 (compatible elaboration): the translation benefits from additional concepts or structure, but without violating MM's basic principles (for example, by making interuniversals explicitly hierarchical or multi-resolution).

- Type 3 (conflicting overlay): preserving a ToF claim literally would require postulates that conflict with MM's stance (for example, mind-independent target Forms or privileged God's-eye access). Type 3 is not treated as "wrong"; it is treated as a clear statement of cost.

The paper's overall conclusion, previewed here and defended in the main text, is that the ToF → MM mapping is Type 2 overall (minimal): most items admit a Type 1 mapping under the fixed non-realist default, while Items 10–11 motivate limited Type 2 additions; Type 3 remains a clearly labeled optional overlay rather than a hidden assumption.

Two parts of the mapping deserve special emphasis because they often drive readers toward realism if handled too quickly.

First, mathematics, and especially geometry, is frequently treated as Plato's strongest evidence for mind-independent Forms. We argue instead that mathematics is a case of unusually tight interuniversal stabilization: explicit definitions, proof norms, and correction procedures create a regime that can function as if it were invariant across time and persons. This claim is reinforced by a historical point: foundational geometric concepts emerged through practical problem-solving, progressive idealization (e.g., Euclid's point/line), and later axiomatization—precisely the sort of tightening process MMToU predicts for interuniversals.

Second, the Form of the Good is treated not merely as another Form but as a highest-order orienting principle. We translate this functionally via PISC (Principle of Increased Self-Control), which in MM serves as the highest-order orienting principle for evaluating DS's state and (on MM's postulated picture) its long-run direction of evolution. PISC does not "create" Forms as a metaphysical generator of being. Rather, it supplies a principled way to understand why some stabilizations matter more than others: DS tends to generate, reinforce, and propagate those universals and interuniversals that increase predictive and practical self-control.

Structure of the paper. Section 2 presents Plato's Theory of Forms as a sequence of seventeen core claims. Section 3 fixes the MM/MMToU vocabulary used throughout. Section 4 presents the high-level mapping results and the overall Type classification, while Appendix A contains the full 17-item mapping register. Section 5 clarifies how MM treats "existence" and "reality" talk in Plato and stabilizes the Form-term under the non-realist default. Section 6 states the conflict-resolution policy (prefer reinterpretation of ToF claims over revising MM's basic stance) and explains how Type 3 overlays are quarantined. Section 7 addresses three focal issues—collectives, mathematics, and the Good/PISC—and Section 8 articulates the broader implications for comparative metaphysics. Section 9 gives the final classification and outlook.

2. Plato's Theory of Forms in Seventeen Core Claims

This section presents Plato's Theory of Forms (ToF) as a sequence of seventeen core claims.

1) Forms (eidos/idea; plural **eidē/ideai) as the most real, non-physical entities**

Plato calls the fundamental objects of his metaphysics Forms (Greek: eidos, idea), often referred to as the F itself ("the Beautiful itself," "the Just itself," etc.).
Forms are non-physical, aspatial (not in space), and atemporal (not in time). They are unchanging, perfect, and the most real beings, in contrast to physical things, which are changing and less real.

Clarifications (for precision and later use):

- Dialogue anchors: *Phaedo* (Forms as stable targets of understanding), *Republic* VI–VII (Line/Cave/Good), *Timaeus* (model vs. becoming).
- "Most real" can be read as a stability/explanatory-priority thesis internal to Plato's framework (middle dialogues), rather than as a modern "mind-independent entity" thesis. The later *Sophist* complicates a strict "stability = being" criterion (see Item 17).
- Scientist-facing analogy (limited): Forms function like stable invariants/standards relative to which variable measurements/instances are assessed.

2) Forms as essences and answers to "What is X?"

For Plato, each Form is the essence (ousia) of a kind of thing—what it is to be that thing. To ask "What is F?" (What is justice? What is beauty?) is, for him, to seek the Form of F. Particular just actions or beautiful objects are not justice or beauty themselves; they are instances that derive their character from the Form Justice or the Form Beauty.

Clarifications:

- Dialogue anchors: *Euthyphro* (the "what is it?" demand), *Meno* (search for what virtue is), *Phaedo* (Beautiful itself / Equal itself).
- This is the conceptual engine behind "one-over-many": a single explanatory target is sought for many cases.

3) Two-level (intelligible / sensible) structure of reality

Plato distinguishes:

- The intelligible realm (Greek: noēton topon), where Forms reside and are grasped by intellect (nous).
- The sensible realm (Greek: horaton topon or world of phainomena), our everyday world of change, becoming, and perception.

This is expressed through images such as:

- The Divided Line (Republic VI), which contrasts knowledge of intelligible objects (Forms, mathematical entities) with belief/opinion about visible things.
- The Allegory of the Cave (Republic VII), where shadows and artifacts correspond to sensible things, and the world outside the cave corresponds to Forms.

Clarifications:

- Dialogue anchors: *Republic* VI (Divided Line), VII (Cave), *Phaedo* (sensible vs. intelligible), *Timaeus* (model vs. becoming).
- The "two-level" picture is not merely spatial; it is a difference in kind of object and kind of cognition.

4) Participation (methexis): particulars have properties by participating in Forms

Plato says sensible things are F (e.g., beautiful, just, equal) by "participating in" or "sharing in" the Form F. "Participation" (methexis, metechein) is a deliberately vague relation: a particular beautiful thing is beautiful because it somehow shares in or imitates the Form of Beauty itself. All things that are F are F in virtue of the Form F; the Form is the cause or ground of the F-ness of its many instances.

Clarifications:

- Dialogue anchors: *Phaedo* (Beautiful because of Beauty), *Parmenides* (participation puzzles).
- "Deliberately vague" is important: Plato uses participation to do explanatory work while acknowledging that the mechanism is not cleanly specified.

5) Forms as perfect paradigms; sensibles as imperfect imitations

Forms function as paradigms or patterns (paradeigmata): perfect exemplary models that sensible things imitate as best they can. Sensible objects are always imperfect, mutable, and defective copies of their Forms. E.g., a drawn triangle is never perfectly straight or exact, but we recognize it as a triangle only because we have an intellectual grasp of the perfect Form of Triangle. The same holds for circles, beds, tables, human beings, etc.; the many visible instances "strive to be" like the one intelligible Form but never fully match it.

Clarifications:

- Dialogue anchors: *Republic* X (three beds), *Timaeus* (model/copy idiom), *Phaedrus/Symposium* (beauty and ascent).
- Scientist-facing analogy: the Form behaves like a specification; instances are imperfect realizations with tolerances, noise, and drift.

6) Degrees of reality and value: Forms "are" more fully than sensibles

Plato holds that Forms "are" in a fuller, stronger sense than particular things. Sensible things are in a state of becoming, constantly changing and therefore metaphysically unstable; Forms are pure being, unchanging and thus more real. This ontological hierarchy is intrinsic: Forms are ontologically prior to their instances; sensible things depend on Forms, not vice versa.

Clarifications:

- Dialogue anchors: *Phaedo* (always-the-same vs. changing), *Republic* (Line/Cave), later pressure in *Sophist* (see Item 17).
- This is where Plato's "being talk" becomes maximally loaded; later, in the MM translation, this is the point where bracketing/disciplining will matter.

7) Forms as objects of genuine knowledge (epistēmē); sensibles as objects of opinion (doxa)

Plato distinguishes knowledge (epistēmē) from true opinion/belief (doxa). True knowledge must be certain, stable, and necessary, which requires unchanging objects; therefore, only Forms can be objects of knowledge. Sensible objects, constantly changing, can at best ground belief or opinion, not full-blown knowledge. We can say that a particular thing appears beautiful now, but only the Form of Beauty is a proper object of knowledge that beauty is.

Clarifications:

- Dialogue anchors: *Republic* V–VII (knowledge vs. opinion), *Theaetetus* (pressure on defining knowledge), *Phaedo* (Forms as stable objects).
- Scientist-facing analogy: stable theoretical targets permit something like theorem-grade certainty; variable targets support at best well-calibrated estimation.

8) Form of the Good as supreme principle

Among Forms, the Form of the Good holds a uniquely privileged position in *Republic VI–VII*. Plato describes it as:

- The source of intelligibility: as the sun makes visible things seeable and visible, the Good makes intelligible things knowable.
- The source of being and reality for the other Forms: Forms "are" and are good by participation in the Good.

The Good is thus ethically, epistemologically, and ontologically prior: without it, nothing could be known or be good or even properly be at all.

Clarifications:

- Dialogue anchors: *Republic* VI–VII (Sun/Line/Cave; "beyond being"), with later interpretive tensions (how literal is "source of being"?).

- This is a key junction where Plato's ethical, epistemic, and metaphysical layers explicitly fuse.

9) Relations and hierarchy among Forms (structure of the intelligible)

Forms are not a flat list; there are relations among them—e.g., some more general, others more specific. Plato often suggests hierarchical or structural relations: Moral Forms (Justice, Temperance, Courage) are subordinated to the Good. In dialogues like *Sophist* and *Parmenides*, he explores relations like Being, Sameness, Difference, Rest, Change, and the "one–many" problem among Forms. This hints at an internal logic of the Forms, even though Plato does not present a formal system.

Clarifications:

- Dialogue anchors: *Sophist* (Being/Sameness/Difference/etc.), *Parmenides* (one–many, self-predication pressures), *Republic* (ethical hierarchy).
- Scientist-facing analogy: the Forms are not a mere set; they behave like a structured theory space with constraints and interdependencies.

10) Soul as akin to Forms: immortal and capable of knowing them

Plato's soul (psychē) is immortal and more akin to the intelligible realm than to the body; it is simple, invisible, and not compounded of parts in the way bodies are. Because the soul is kin to Forms, it can grasp Forms directly when not impeded by bodily distractions. In Phaedo, Plato argues that the philosopher should separate the soul from bodily concerns precisely to contemplate Forms such as Justice itself, Beauty itself, and so on.

Clarifications:

- Dialogue anchors: *Phaedo* (immortality and affinity), *Phaedrus* (soul and ascent).
- This is an enabling premise for recollection and for the epistemic ascent model.

11) Recollection (anamnesis): learning as remembering the Forms known before birth

Recollection (Greek: anamnesis) is Plato's theory that what we call "learning" is actually remembering knowledge the soul had before embodiment.

Key elements:

- The soul existed before birth and had direct acquaintance with Forms.
- Sense experiences in this life "remind" the soul of what it already knows (e.g., equal sticks trigger recollection of the Form of Equality).

In *Meno*, Socrates demonstrates this through the slave-boy geometry example: guided questioning elicits correct geometrical insights without "teaching" new content, suggesting latent knowledge. Thus, knowledge of Forms in this life is not acquired from the senses but reawakened by them.

Clarifications:

- Dialogue anchors: *Meno* (geometry episode), *Phaedo* (Equality and recollection).
- Scientist-facing analogy: empirical triggers act like prompts that activate latent structure; the information is not "transmitted" by the prompt in the strong sense.

12) Sensibles as images and imitations; metaphors of Sun, Line, Cave, and three beds

Plato frequently uses imagery to explain the relation between Forms and sensibles:

- Sun analogy: as the sun gives light and visibility, the Good gives intelligibility and being to Forms and, by extension, to sensibles.
- Divided Line: a graded scale from images (shadows, reflections) → physical things → mathematical objects → Forms. Each higher level is more real and more knowable than the previous.
- Cave allegory: prisoners see only shadows (images of artifacts) and mistake them for reality; liberation corresponds to turning toward and eventually seeing the Forms and the Good.

Three beds (*Republic X*):

- Form of Bed (true bed, made by God).
- Actual physical beds (made by craftsmen, imitating the Form).
- Painted images of beds (made by artists, imitating the physical beds).

This illustrates levels of remove from the Form and a hierarchy of reality and truth.

Clarifications:

- Dialogue anchors: *Republic* VI–VII (Sun/Line/Cave), X (three beds).
- The "three beds" passage is especially relevant later because it compresses metaphysics, epistemology, and critique of representation into one example.

13) Forms of ethical and aesthetic properties (Justice, Beauty, etc.) and their practical significance

Plato insists that there are Forms not only of physical kinds (Human, Triangle) but also of values and norms, such as: Justice, Goodness, Beauty, Piety, Courage, etc. The just city and the just soul in *Republic* are constructed by reference to the Form of Justice; the philosopher-king must know the Forms, especially the Good, to rule properly. In *Symposium*, Diotima's ladder of love culminates in the Form of Beauty itself, access to which is the apex of eros and philosophy.

Clarifications:

- Dialogue anchors: *Republic* (justice in city/soul; philosopher-king), *Symposium* (Diotima's ladder).

- This claim prevents a "purely mathematical" reading of ToF; it is inherently practical and normative.

14) Forms as causes: explanatory role of Forms in the being and properties of things

In *Phaedo*, Socrates argues that genuine explanations must refer to Forms:

- Something is beautiful because it participates in the Form Beauty;
- Something is equal because it participates in Equality;
- The Form of Life is what the soul always participates in, explaining why the soul is essentially alive.

Thus, Forms are causes (aitiai) in a strong sense: they explain why things are as they are.

Clarifications:

- Dialogue anchors: *Phaedo* (the "safe" explanations via Forms; second sailing).
- The "cause" here is best treated as explanatory ground (why-it-is-F), not a modern mechanical cause.

15) Forms as paradigms for craft and creation (paradeigmata in Timaeus and Cratylus)

In *Timaeus*, the Demiurge (divine craftsman) orders the cosmos by looking to unchangeable Forms as models or blueprints and impressing their structure on pre-existent chaotic matter. In *Cratylus*, Plato suggests that craftsmen too look to an archetype (paradeigma) when making physical objects (for instance, a bed-maker looking to the idea of Bed). This reinforces the idea that Forms are standards for correct making and knowing.

Clarifications:

- Dialogue anchors: *Timaeus* (Demiurge and model), *Cratylus* (craft and naming), *Republic* X (bed-maker vs. painter).
- This is one of the most "top-down sounding" parts of ToF and will later require careful handling in the MM translation.

16) Epistemic ascent: dialectic as the method of moving from sensibles to Forms and the Good

Dialectic is Plato's term for the highest philosophical method—a rational, question-and-answer process that moves beyond assumptions to grasp first principles. In *Republic*, dialectic is the method by which the philosopher ascends from sensible examples and hypotheses (e.g., about justice, beauty) to the direct contemplation of the Forms and ultimately the Good itself. Dialectic thus operationalizes the "turning of the soul" from becoming to being and is the educational path of philosopher-guardians.

Clarifications:

- Dialogue anchors: *Republic* VI–VII (dialectic and education), *Phaedrus* (method and ascent), *Theaetetus* (limits of definitions).
- Scientist-facing analogy: dialectic functions like iterated model revision under constraint, pushing toward more stable explanatory primitives.

17) Self-critique and problems: participation, one–many, the "Third Man", and existence

In *Parmenides*, Plato has Parmenides raise hard objections against the Theory of Forms, including:

- The participation problem: What exactly is the relation by which many particulars share in one Form?
- The Third Man argument: If man is man by sharing in the Form Man, and both are man, we seem to need another Form to explain their similarity, generating an infinite regress.

Plato, eventually moved away from "Stability = Being" exclusivism by adopting a **relational** definition of being. In the *Sophist*, he introduces the "Power" (*dynamis*) definition: anything that has the power to affect or be affected by something else possesses Being. This "inclusive" definition allowed motion, life, and the physical world to be brought back into the realm of reality.

These show that Plato himself recognized difficulties in his own doctrine and that the exact nature of Forms and participation is not fully clarified in the dialogues.

Clarifications:

- Dialogue anchors: *Parmenides* (core self-critique), and later constructive moves in *Sophist* (see Item 9's mention of Being/Sameness/Difference; also relevant to revising "being" criteria).
- This item is essential for our later methodology: the mapping must respect that Plato's ToF is not a single fully axiomatized theory but a family of claims under internal pressure.

3. Minimal MM/MMToU background needed for the mapping

3.1 Data System, The Model, and My Model

The mapping in this paper assumes a minimal set of structural commitments from My Model Metaphysical Framework (often abbreviate as "MM"). The first is that the universe is treated as a closed, fully connected, changing system: change is fundamental, and "time" is understood primarily as change rather than as an independent background parameter.

Within this picture, MM adopts an informational idiom: what we ordinarily call "physical objects" are treated as informational configurations inside the universe's overall dynamics.

MM then introduces the *Data System (DS)* as an organized informational substrate: a way of speaking about the universe as an informational system whose internal interactions can support observation-like relations (communication, registration, constraint propagation) among its subsystems. DS is not introduced as a second universe "beside" the universe; it is introduced as a modeling posit that allows one to talk explicitly about informational organization and the role of model-mediated interaction in the universe's evolution.

A second key construct is *TM (The Model):* the intersubjective aggregate of human experience and cognition—human perceptions, knowledge, concepts, beliefs, theories, emotions, and linguistic practices, including inconsistencies and partial models. MM metaphysical framework defines *MM (My Model)* as an individual agent's owned subset of TM: the agent's private, revisable conceptual and experiential inventory. TM is a set union of MMs for all people ever lived. In this hierarchy, MM does not treat human consciousness as metaphysically fundamental; rather, consciousness is situated as a subsystem within TM (and thus within DS). The practical upshot is that "mind-products"—concepts, standards, arguments, mathematical structures, scientific models—are not treated as ontological outsiders. They are DS phenomena, and therefore they belong on the same explanatory playing field as "physical" systems.

An important component of MM is the "No God's Eye View" principle: no subsystem of DS is in a privileged epistemic standpoint that has direct, complete, non-model-based access to DS "as it is in itself."

Two terminological constraints follow for the rest of the paper. First, because everything belongs to DS in this framework, the phrase "DS-level" is not informative and is avoided. Second, when we need to name DS phenomena that are not ordinary physical objects (e.g., coordinated standards, shared conceptual structures), we will use the term *non-physical DS-structure*.

3.2 PISC as a directional postulate about change

MM's principal dynamical posit is *PISC (Principle of Increased Self-Control)*. PISC is not presented as a theorem, and it is not claimed as a metaphysical certainty. It is offered as a high-level model of directionality: the universe's evolution tends—often irregularly and through many local reversals—toward configurations that exhibit greater capacity for control, understood broadly as the ability of a system (or network of systems) to reliably reach a wider range of states or outcomes.

The intended motivation is methodological rather than dogmatic: PISC is treated as a hypothesis-like metaphysical postulate whose value is measured by explanatory and heuristic fruitfulness. In practice, PISC is used to frame familiar patterns—rising

organizational complexity, the emergence of life, the increasing sophistication of cognition and technology, and the growth of collective infrastructures (institutions, standards, networks)—as instances of expanding control capacities. The paper does not require a strong reading of PISC; it requires only that PISC be understood as MM's preferred way of summarizing the directionality of change at a high level of abstraction.

3.3 MMToU primitives: particulars, universals, interuniversals, and stabilized correctness

My Model's Theory of Universals (MMToU) supplies the conceptual machinery needed to translate Plato's "Form-term" without importing a realist ontology of mind-independent abstract entities. MMToU begins with *particulars*, treated as relatively localized configurations and processes within DS—encounterable "items" for an agent, whether these are ordinary objects, events, measurements, or more complex patterns.

A *universal* is then defined as an agent-level classificatory data structure, owned by a particular agent and residing within that agent's MM. A universal is not a Platonic entity; it is a tool of compression and prediction: it groups encountered particulars under a predicate ***F*** (e.g., "triangle," "bed," "just") in a way that supports inference and action. "Private" here is primarily a matter of ownership and control (the agent's ability to create, revise, or delete the structure), not necessarily a matter of access: in principle, other agents may access or read another agent's universal as a DS phenomenon.

An *interuniversal* is the collective counterpart: a stabilizing non-physical DS-structure consisting of (i) a network of aligned agent-owned universals that play roughly corresponding classificatory roles and (ii) the linking resources that support that alignment—language, pedagogy, standards, instruments, institutions, and other coordination mechanisms. Interuniversals can be hierarchical and multi-resolution: different sub-collectives can stabilize different "nodes" (e.g., a mathematicians' triangle-concept and a schoolchildren's triangle-concept) while still participating in a broader coordinated structure.

Universals and interuniversals are both non-physical DS-structures; they differ by locus and function: universals are agent-owned classificatory structures, interuniversals are collective stabilizers that coordinate and normatively constrain those universals.

This framework yields a distinctive account of correctness. In MMToU, the statement "x is F" is not interpreted as the discovery of an intrinsic property that x possesses independently of any modeling regime. Rather, it is a relational classification fact: x is classified as F by an agent's universal within a context stabilized by the relevant interuniversal. Correctness and error are evaluated internally to DS via a combination of predictive success, coherence with other stabilized commitments, and practical contribution to control (in a broad PISC-compatible sense). This is the key reason MMToU can support a non-realist translation of Plato's Form-term: it can explain how stable, norm-

governing structures arise and function as "blueprints" in practice without introducing an additional mind-independent abstract object that serves as a correspondence target.

4. Main mapping results (high-level summary)

4.1 Fixed non-realist definition and mapping discipline

This section fixes the meaning of the Form-term for the entire mapping and specifies the discipline by which Plato's claims (Section 2) are translated into MM and MMToU. The point is to prevent uncontrolled shifts between different senses of "Form" and to make explicit what counts as a Type 1 (clean), Type 2 (compatible but extending), or Type 3 (conflicting) translation.

4.1.1 The fixed definition and its scope

Throughout this paper, and unless explicitly marked otherwise, we adopt the following Type 1 default:

Form(F) = the interuniversal for F

Here **F** ranges over the kinds of predicates that appear in Plato's ToF as presented in Section 2: not only "natural-kind" style predicates (e.g., Human), but also mathematical predicates (e.g., Triangle), artifact predicates (e.g., Bed), and—crucially—ethical and aesthetic predicates (e.g., Justice, Beauty), as well as the special status of the Good (Section 2, Items 8 and 13). This definition is a translation rule: it does not claim that Plato "really meant" interuniversals. It specifies how the Form-term will function inside the MM vocabulary in the baseline mapping.

4.1.2 What participation, imitation, and paradigms become under the fixed definition

Plato's ToF employs participation (methexis), imitation/copy, and paradigm/blueprint talk to relate Forms to sensibles (Section 2, Items 4, 5, 12, 15). Under the fixed definition, these are translated as follows.

1. *Participation.* A particular is F "by participating in" Form(F) is translated as: the particular is classified under **F** by an agent's universal within a context stabilized by the interuniversal for **F**. In MMToU terms, "x is F" is a relational classification fact: it involves (i) x as a DS configuration, (ii) an agent's universal for F, and (iii) a stabilizing interuniversal regime that constrains and corrects the application of F.
2. *Imitation and imperfect copies.* The claim that sensibles are imperfect imitations of Forms becomes: physical tokens and local practices are imperfect, noisy, and context-fragile realizations of an interuniversal's normative core. Here the relevant "perfection" is not correspondence to a mind-independent target entity; it is the

idealized stability and coherence of the coordination regime relative to which tokens are judged correct, incorrect, or approximate.

3. *Paradigms and blueprints.* When Plato says a craftsman (or the Demiurge in the *Timaeus*) "looks to" a Form as a model (Section 2, Item 15), the baseline translation treats the "model/blueprint" role as the interuniversal's stabilizing standards and correction mechanisms: the norms, exemplars, procedures, and inferential commitments that guide correct making and correct judging.

This translation preserves the functional roles that matter for Plato's explanatory ambitions—standard-setting, correction, and intelligibility—without introducing an additional metaphysical object beyond the interuniversal itself.

4.1.3 The non-realist constraint: no mind-independent target Form in the baseline mapping

The definition *Form(F) = interuniversal for F* is adopted precisely to block a slide into realism. In a realist reconstruction, correctness would be grounded by correspondence to a mind-independent abstract entity (a "target Form") that exists and is what it is regardless of any modeling regime. This paper does not assume such entities in the baseline mapping. Accordingly, every use of the Form-term in Type 1 mapping is governed by the following constraint:

> *Correctness is evaluated internally to DS via stabilization within interuniversals (coherence, predictive success, and correction), not by correspondence to a mind-independent target Form.*

If and when a mind-independent "target structure" is introduced to address specific Platonic claims that resist the baseline translation, it will be introduced only under an explicitly labeled Type 3 move. It is not part of the default semantics of "Form" in this paper.

4.1.4 Relationship to Plato's "degrees of reality" and "most real being" talk

Plato's middle-dialogue rhetoric that Forms are "more real" because they are unchanging and perfect (Section 2, Items 1 and 6) is not treated here as a literal ontological thesis that MM must adopt or reject. As argued in Section 5, MM brackets "degrees of reality" talk as outside its primary explanatory domain while still translating the functional role of Plato's stability contrast.

Within the present mapping discipline, "unchanging/perfect" is therefore read as marking the role of Forms as stable standards and explanatory primitives, a role captured by interuniversal stabilization. This preserves why Plato needs Forms for knowledge, explanation, and correct practice (Section 2, Items 2, 7, 14, 16) without committing the mapping to a metaphysics of atemporal entities.

4.1.5 A note on Plato's top-down imagery and the bottom-up character of interuniversals

A predictable tension arises from Plato's top-down presentation of Forms as paradigms, especially in the Demiurge narrative of the *Timaeus* and in craft analogies (Section 2, Item 15). MMToU is bottom-up: interuniversals are necessarily stabilized through coordination among agents and their universals.

The baseline discipline therefore treats Plato's top-down imagery as a compressed way of presenting a hierarchy of stabilization and authority within a coordination regime, not as a literal report of an agent's privileged access to a mind-independent entity. Where Plato's claims require stronger readings (e.g., perfect grasp, ungenerated being in a robust metaphysical sense), those pressures will be registered explicitly as Type 2 or Type 3 issues in the per-item Appendix A and summarized in Section 5.3.

4.2 Summary of mapping outcomes across the 17 items

Appendix A executes the mapping item-by-item, using the fixed Type 1 default *Form(F)* = *interuniversal for F* and then registering—only where needed—Type 2 and Type 3 pressures. This section summarizes the outcome at a reader-facing level: what maps cleanly, where modest extensions are helpful, and which Platonic commitments would force departures from MM's basic methodological stance.

4.2.1 What maps cleanly under the fixed non-realist definition (Type 1 core)

A large portion of ToF's *functional architecture* carries over directly once Forms are treated as interuniversals (rather than mind-independent entities). The result is a translation that preserves Plato's key explanatory moves in the *Phaedo* and *Republic* while remaining MMToU-faithful:

- *One-over-many and shared standards*. The "one over many" structure is captured by the interuniversal's role as a collective stabilizer for a predicate F: many particulars are correctly classified as F because there exists a stabilized regime that governs correct application across agents. This reproduces Plato's insistence that correct classification is not merely private association, but answerable to stable standards.
- *Participation and imitation as constraint-governed classification and realization*. "Participation" becomes the relational fact that a particular is classified under F within a stabilized interuniversal regime; "imitation" becomes imperfect realization under a specification-like norm system. The explanatory role of Forms as causes (aitiai) is preserved in an internal, DS-based sense: interuniversals constrain judgment and production, thereby explaining convergence, correction, and domain competence (e.g., craft examples in *Republic* X).
- *Knowledge/opinion contrast as stabilization contrast*. The *Republic* and *Phaedo* distinction between epistēmē (knowledge) and doxa (opinion) is captured by

degrees of stabilization: knowledge-like states are those integrated into robust interuniversal correction pathways; opinion-like states remain anchored to local cues without stable norm-governance.

- *Dialectic and "turning the soul" as universal reconfiguration.* Plato's dialectic (especially in *Republic* VI–VII) translates cleanly as disciplined revision and reorganization of universals under interuniversal constraints. The Cave, the Divided Line, and the pedagogical arc are naturally re-read as transformations in a learner's modeling regime: from impoverished, locally trained universals to universals aligned with stronger, more correction-rich interuniversals.
- *Third Man regress blocked by category discipline.* The *Parmenides* regress pressure is neutralized at the level of the translation rule: interuniversals are not peer instances of F; they are stabilizing non-physical DS-structures that govern the application of F to particulars. This blocks the key premise that generates an infinite hierarchy of "Forms of Forms."

These Type 1 successes are not cosmetic. They show that much of what makes ToF philosophically powerful—its account of objectivity, correction, explanation, and the discipline of inquiry—can be expressed without positing mind-independent abstract entities.

4.2.2 Where Type 2 extensions are helpful (compatible additions, not conflicts)

Some Platonic themes can be translated in a Type 1 spirit but become substantially clearer if we allow modest Type 2 elaborations that remain compatible with MM/MMToU. These do not change the meaning of Form(F); they refine how interuniversals can be structured or how Plato's imagery can be situated in MM terms.

- *Hierarchical and multi-resolution "Forms."* Plato often treats Forms as internally structured and hierarchically related (e.g., the later metaphysical grammar in the *Sophist*). MMToU already permits interuniversals to be hierarchical/multi-resolution; a Type 2 clarification can make explicit that what Plato calls "the same Form" may correspond to a structured interuniversal with multiple stabilized nodes across sub-collectives (e.g., novice vs expert nodes), without implying an external target entity.
- *Top-down "blueprint" imagery in the Timaeus.* The Demiurge's "looking to" a paradigm can be rendered Type 1 as blueprint-guided production by a maximally stabilized regime. A Type 2 add-on can explicitly model *degrees of stabilization authority* (a gradient of norm enforcement and correction power) to match Plato's narrative compression—without introducing privileged access to a mind-independent Form.
- *Recollection as constraint phenomenology (the Meno).* Appendix A treats recollection non-literally as a phenomenology of constraint: strong interuniversal regimes can guide an agent toward correct judgments that outstrip immediate experience. A Type 2 refinement can model individual differences in learning

(strength of coupling, precursor universals, pedagogical efficiency) while staying fully inside MMToU.

In short: Type 2 is mainly useful for articulating *structure*—hierarchies, stabilization gradients, and learning dynamics—rather than for adding new ontological furniture.

4.2.3 Which Platonic claims would force Type 3 if read literally (conflicts with MM's basic stance)

A small but philosophically central subset of ToF claims resists a fully MMToU-faithful translation if they are taken as literal metaphysical ontology rather than as role-defining rhetoric. These are the points at which a realist reading becomes tempting—and at which MM's "No God's Eye" discipline is put under pressure.

- *Forms as ungenerated, mind-independent, atemporal entities.* If one insists that Forms are not merely stable standards within DS but metaphysically ultimate entities that exist and are what they are regardless of any modeling regime, then one must introduce a mind-independent target structure for each F. That move is exactly what the Type 1 definition avoids; it amounts to a Type 3 departure from MMToU's bottom-up, model-centric discipline.
- *Perfect grasp / privileged access (gods or Demiurge).* If Plato's talk of perfect apprehension is treated as literal omniscience or infallible access to Forms, this requires a privileged standpoint inconsistent with MM's rejection of a God's-eye viewpoint. It is not that MM cannot *describe* such a postulate; it is that doing so changes the basic epistemic posture of MM in a way that is, by our taxonomy, Type 3.
- *"Most real being" as an ontological thesis rather than a stability marker.* The middle-dialogue identification of "what is" with the unchanging (especially in the *Phaedo* and *Republic*) can be translated, as Section 5 argues, by bracketing it as metaphysical ontology while preserving its internal function as a stability/explanatory-priority claim. If instead one insists that MM must reproduce the literal metaphysical ranking of being, that would again require Type 3 commitments about ontological strata and atemporal entities.
- *The Good "beyond being" as a metaphysical source of being.* The *Republic* VI claim that the Good is "beyond being" and grounds the being/essence of other Forms can be translated functionally as a meta-stabilizer (a highest-order orienting standard). But if one insists on the Good as a metaphysical generator of being in a strong sense, this pushes toward Type 3 metaphysics that outruns MM's minimal ontology.

These are the places where the mapping must decide whether it is translating (i) the *functional roles* ToF assigns to Forms, or (ii) ToF's *literal ontological picture* of a separate intelligible realm of mind-independent beings. Appendix A is explicit: the baseline mapping targets (i); (ii) is treated—when needed—as a Type 3-only enrichment, not as part of the non-realist core.

4.2.4 Overall classification and what the reader should take away

Taken as a whole, the mapping shows that ToF's core explanatory machinery—objectivity via stable standards, knowledge via stability, correction via dialectic, and the pedagogical ascent from appearance to intelligibility—admits a *Type 1 translation* when Forms are fixed as interuniversals. Where Plato's texts press beyond that machinery into strong metaphysical claims (ungenerated mind-independent Forms, perfect grasp, the Good as metaphysical source), the mapping either (a) treats the claim as role-defining rhetoric to be captured by stabilization talk, or (b) registers it as requiring Type 3 commitments if read literally.

5. Existence, reality, and the Form-term in a non-realist MM translation of Plato

The concepts of existence and reality are central to the ToF. In particular, Item **1** states Plato's core thesis that Forms are "unchanging, perfect, and the most real beings," contrasted with changing sensible things; Item **6** makes the corresponding "degrees of reality" claim explicit; Item **12** concentrates the same hierarchy in the Sun/Line/Cave imagery and the "three beds" example; Item **15** presents Forms as paradigms (paradeigmata) used as blueprints in craft and cosmology; and Item **17** records Plato's later shift in the *Sophist* toward a dynamis (power) criterion of being. The present section explains how MM handles this cluster of "existence/reality/being" claims—claims that are central to Plato's Form-term—without importing a realist ontology of mind-independent abstract entities.

5.1. Plato's middle-dialogue contrast: being as stability, sensibles as becoming

In Plato's middle dialogues, the Theory of Forms (ToF) is frequently presented through a sharp contrast between *what is* and *what becomes*. The intelligible objects grasped by reason are described as "always the same," whereas the visible objects grasped by sense are described as "constantly changing." This contrast is not merely epistemic; it is commonly treated as ontological: to "really be" (ontos on) is to be unchanging, self-identical, and (in the relevant sense) atemporal, while sensibles are relegated to the status of becoming.

This middle-period "stability = being" posture creates a natural explanatory picture: sensible objects are what they are only imperfectly and variably, because they are unstable; Forms are what they are perfectly and reliably, because they are stable. Plato's picture thereby makes "reality" appear graded: Forms are "more real" than sensibles (Section 2, Items 1 and 6). For purposes of mapping into MM, the important point is not to

adjudicate whether Plato's criterion is correct, but to recognize how much of ToF's conceptual load is carried by this stability-based rhetoric of existence and reality.

A further complication—already internal to Plato's corpus—is that this stability-based criterion can be pressed toward circularity: if "to be" is defined by the special attributes of Forms (permanence, self-identity, perfection), then it can look as though "being" has been defined in a way that essentially presupposes Forms. Plato's later dialogue *Sophist* is often read as responding to this pressure by offering a different "reformed" criterion of being: being as *dynamis* (power)—the capacity to affect or be affected (Section 2, Item 17). This later move matters because it helps to show that the "stability = being" criterion is not the only Platonic route—and that Plato himself explores a more *relational* notion of being, which is one of the cornerstones of MM.

5.2. MM's stance: existence and reality are not primary explanatory primitives

MM begins by placing a hard limit on what it treats as available in metaphysical discourse. Something exists, and we refer to it as the universe; beyond that, MM is designed to speak primarily in terms of models, representations, and perceptions rather than in terms of absolute "existence" and "reality" categories. This is not a skeptical denial of the world; it is a methodological decision about what does explanatory work inside MM. MM's central constructive posit is the Data System (DS)—an organized informational substrate through which the universe can be modeled—and MM's central dynamical posit is PISC (Principle of Increased Self-Control), a proposed directionality in the evolution of DS toward greater capacity for control. (Both are treated by MM as "ontological models" in the limited sense that they are the most general commitments within MM, while still being *models* rather than final metaphysical certainties.)

Two corollaries of this stance are directly relevant for translating Plato's "most real beings" language. First, MM treats mind-products—models, concepts, theories, inferential structures—as themselves DS phenomena. For that reason, a traditional metaphysical contrast between "mind-dependent" and "mind-independent" entities is not a well-behaved foundational separator within MM: minds and their products are not outside DS, but part of DS. Second, because DS is modeled as a fully connected system in which subsystems interact and co-determine one another, "reality" and "existence" (in their traditional philosophical senses) tend not to function as sharp theoretical discriminators inside MM's domain. In particular, if one adopts something like the *Sophist dynamis* criterion—being as capacity to affect or be affected—then in a DS picture "everything exists" in the relevant sense, because everything participates in interaction. Under that criterion, existence ceases to be selective and thus ceases to do the kind of philosophical work it does in Plato's middle-period posit.

This is the basis for a clean methodological decision in the mapping: when Plato claims that Forms are unchanging, perfect, and "most real," MM does not treat those claims as literal ontological theses that MM must accept or reject. MM *brackets* them as

metaphysical ontology claims that are outside MM's primary explanatory focus. That bracketing, however, does not prevent MM from offering a disciplined translation of the *functional role* those claims play in Plato's system.

5.3. Individuation, "literal existence," and why observation creates meta-level structures

A common temptation—especially when one wants to preserve Plato's "ungenerated" rhetoric—is to say that Forms "exist literally" prior to any observer, as if DS were a warehouse of already-labeled abstract objects waiting to be pointed at. We explicitly prohibit this language in the mapping, for a technical reason: any act of "seeing" a structure as a unit involves *individuation*, which is itself a model-mediated act. Even in an informational idiom, a "bit string" is not merely "many 0s and 1s"; a string presupposes an ordering or indexing relation, i.e., a meta-structure that makes the relevant grouping and sequence determinate. The general lesson is that "being seen as a determinate structure" requires a meta-level act: the observer constructs a data structure that functions as a model of what is being individuated.

This does not force idealism ("nothing exists unobserved"). It forces a more precise distinction: DS is given, but *structure-as-a-unit* is relative to observers, modeling, and stabilization. One useful way to express this—consistent with MM's emphasis on modeling—is a potentiality/actuality vocabulary: DS affords many potential individuations; a particular "Form" becomes actual as a determinate unit only when a subsystem (an observer) individuates and stabilizes it as a universal, and later as an interuniversal. Here "potentiality" is not treated as a second metaphysical realm; it is simply the claim that DS can support many possible carve-ups, while "actuality" is the emergence of a stabilized unit within a modeling regime.

This distinction is particularly important for keeping the mapping non-realist while still making sense of Plato's language that Forms are not mere human inventions. On the MMToU reading, a Form is not "invented" as an arbitrary stipulation; it is stabilized as a collective norm system that constrains correct classification and construction.

5.4. Recasting "unchanging / perfect / most real" without adding a mind-independent target

With the Form-term fixed as an interuniversal, we can now state the non-realist translation of the middle-dialogue contrast—while keeping MM's methodological bracketing of literal metaphysical ontology. The translation does not say: "Forms are metaphysically outside time, therefore more real." It says: Plato's stability language is performing a role that MM can express in terms of stabilization.

- *Unchanging:* the relevant feature is the relative invariance of the interuniversal's normative core—the standards that govern correct application of F and the inferential role that F plays inside coordinated practice. This core can be maintained

as invariant across many contexts by stabilizing resources (training, enforcement, measurement protocols, canonical formulations).

- *Perfect:* the relevant feature is an idealization internal to the practice: maximal coherence, maximal determinacy of standards, minimal drift under correction. "Perfection" is not correspondence to a perfect target entity; it is a limit-ideal of stabilization and coherence within the interuniversal.
- *Atemporal:* the relevant feature is not existence "outside time," but cross-temporal normative authority: the interuniversal's core is intended to apply across times, and its identity is tracked by role and stabilization history rather than by any particular physical token.

This is the precise sense in which the mapping avoids realism: it relocates Plato's "being = stability" emphasis from an agent-independent object to a *stabilizing norm system* inside DS.

5.5. The Demiurge, "top-down" presentation, and the *Republic X* "God as maker" passage

A natural worry remains: Plato's ToF is often presented top-down—especially in the *Timaeus* Demiurge narrative (Section 2, Item 15)—and this can appear incompatible with MMToU's bottom-up stabilization. The non-realist resolution is to interpret Plato's top-down sequence as a narrative compression of *hierarchies of stabilization* within the same interuniversal. Interuniversals can have multiple nodes sustained by different sub-collectives, with different degrees of coherence and corrective discipline. In such a picture, the "Demiurge node" is an idealized maximally stabilized node; "gods," "souls," and "humans" correspond to progressively noisier or more fragmented nodes, not to progressively weaker copies of a mind-independent target Form-object.

This also clarifies how we treat claims about "perfect grasp" by the Demiurge. In the baseline non-realist mapping, "perfect grasp" is not omniscient access to a mind-independent entity. It is an idealization of maximal stabilization and coherence within the interuniversal regime—maximal ability to enforce and apply the blueprint-standards. If one insists on literal omniscience or infallible access, that would require adding a privileged-access postulate that conflicts with the MMToU discipline against a God's-eye standpoint; such a move is therefore reserved for Type 3-only discussion rather than built into the baseline mapping.

The same approach makes sense of the puzzling passage in *Republic* X where Socrates speaks as if a god "made one bed in nature," contrasted with the carpenter's bed and the painter's image (Section 2, Item 12). On a non-realist MMToU reading, the philosophical point of the "three beds" device is to dramatize a hierarchy of standards and imitations: there is a privileged blueprint-role (the stabilizing norm), there are artifacts built under that role, and there are images imitating the artifacts. The passage can therefore be read as a didactic way of saying: the blueprint is not a human whim and is not multiplied at will; it is a

constraint system that governs correct making and correct classification. That lesson is captured directly by the interuniversal definition of Form(F), without requiring that a god literally manufactures an abstract entity.

5.6. Why the *Sophist* matters for MM's treatment of "existence" and "reality"

Finally, Plato's *Sophist dynamis* proposal (Section 2, Item 17) is helpful not only historically but methodologically. The Stranger's definition of being as power—the capacity to affect or be affected—shifts the axis from static permanence to relational capacity. That shift aligns naturally with MM's DS picture: if DS is a fully connected system of interactions, then relational capacity is ubiquitous. "Existence," in the *dynamis* sense, becomes too indiscriminate to play the selective role it plays in the middle dialogues. This supports MM's stance that "existence" and "reality" are often low-yield categories inside MM's explanatory domain, even though Plato uses them centrally in motivating ToF.

In this light, the mapping's strategy becomes clear. MM brackets Plato's "most real being" language as metaphysical ontology (not a commitment MM must reproduce), but it can still translate what that language accomplishes: it marks a contrast between stable normative structures and unstable instances. MMToU captures that contrast by interpreting Forms as interuniversals—stabilizing non-physical DS-structures that coordinate classification and construction—without postulating mind-independent target Forms. That is the core sense in which the mapping remains non-realist while still engaging Plato's own texts (*Phaedo*, *Republic*, and *Sophist*) as primary sources.

The results of the mapping presented in Sections 4 and 5 set up the next task of the paper: not to "refute" Plato, but to diagnose precisely which elements of ToF are (1) structurally preservable inside MM/MMToU, (2) preservable with modest compatible elaborations, and (3) preservable only by adopting metaphysical postulates that conflict with MM's governing stance. Section 6 will use that diagnostic to discuss conflict-resolution strategies—preferentially by revising, relaxing, or reinterpreting the ToF claims that force Type 3, rather than revising MM's basic principles.

6. Conflict resolution and interpretive strategy

Section 4 and Appendix A make the diagnostic point: once *Form(F)* is fixed non-realistically as *the interuniversal for F*, much of Plato's ToF can be translated without positing mind-independent abstract entities. The remaining work is not to restate those results, but to explain *how* this translation handles the pressure points where Plato appears to be making a literal metaphysical claim that would, if imported as-is, force a realist (Type 3) enrichment.

The guiding methodological rule for this paper is asymmetrical: when a conflict arises, we first attempt to resolve it by *reinterpreting or relaxing the ToF claim* (in a way that is textually

motivated and philosophically principled), and only as a last resort consider revisions to MM's basic stance. This is not a polemical choice against Plato. It is a consequence of what it means to "map into MM": MM is explicitly a model-centric framework that treats ontology-heavy readings as optional overlays rather than compulsory commitments. Section 5 already motivated this stance in connection with Plato's "most real being" language.

6.1 How to read "two worlds" without importing a second ontology

The standard textbook reading of ToF, especially in the *Phaedo* and *Republic*, presents two "realms": the sensible (changing, visible) and the intelligible (stable, knowable). On the MM/MMToU translation, this language is treated as a compressed way of separating two roles inside DS (Data System):

- *particulars* (objects, events, processes, and relations as encountered in experience and practice), and
- *non-physical DS-structures of modeling* (universals and interuniversals) that function as stable standards, inferential roles, and correction pathways.

This interpretive move is conservative with respect to what Plato is trying to accomplish. Plato needs a principled basis for the difference between (i) being pushed around by appearances and (ii) grasping stable standards that permit knowledge, explanation, and correct practice. The MM translation grants exactly that difference—while refusing the further step of treating it as evidence for a second realm of mind-independent entities.
A useful analogy for scientifically trained readers is the difference between (i) noisy measurement traces and (ii) the stabilized inferential and methodological apparatus that lets a community treat a quantity as objective. The apparatus is not "another physical object in the lab," but it is still real and causally efficacious within DS: it constrains what counts as a valid measurement, how errors are detected, and how models are revised. Plato's intelligible/sensible contrast is then read as a contrast between *token-level flux* and *standard-level stabilization*, not as a contrast between two kinds of being.

6.2 "Unchanging" and "most real": stability claims rather than ontological rankings

Plato's middle-dialogue identification of genuine being with what is unchanging (*Phaedo*, *Republic*) naturally tempts a literal metaphysical reading: Forms are atemporal entities; particulars are less real. MM declines to litigate that ontology. Instead, it treats "unchanging" and "most real" as marking a functional role: *what is stable enough to serve as a standard for correct judgment and as an explanatory primitive*.

This is not an ad hoc reinterpretation. Plato himself later loosens the middle-dialogue equation of being with changelessness. In the *Sophist* he articulates the *dynamis (power/capacity)* criterion: to be is to have the power to affect or be affected. That criterion shifts emphasis away from static perfection and toward relational capacity—much closer in spirit to MM's focus on interaction, modeling, and constraint.

Within MMToU, "unchanging" is best understood as *normative invariance under correction*: an interuniversal is "stable" insofar as its standards and inferential roles persist through error correction, pedagogy, and institutional transmission. Such stability is not absolute—interuniversals can evolve—but it is stable enough to ground the epistemic contrast Plato cares about: the difference between merely tracking local appearances and being answerable to standards that survive local perturbations.

6.3 "Looking to the Form": authority of a stabilizing regime, not privileged access to a target entity

Plato's craft analogies and the *Timaeus* Demiurge narrative intensify the sense that Forms are *top-down blueprints*. In the non-realist translation, "looking to the Form" is not "consulting a mind-independent non-physical DS-structure." It is *orienting production and judgment by a maximally stabilized regime of standards*—exactly what an interuniversal supplies when it is strong.

This does two things at once:

1. It preserves the blueprint function: correct making is guided by stable norms, not by arbitrary preference.
2. It avoids a God's-eye epistemology: there is no commitment to an agent who perfectly apprehends a mind-independent object.

Where Plato's text seems to demand perfect grasp (especially in elevated theological framings), the MM translation treats this as an *idealization*: a limiting case of stabilization in which error correction is so effective that the standards operate as if infallible for the relevant domain. Idealizations of this kind are familiar in science (frictionless planes, ideal gases): they can be explanatorily potent without entailing literal metaphysical entities beyond the model.

6.4 The Form of the Good and PISC

One topic deserves explicit attention at this stage because it plays a structural role in Plato and has a close functional counterpart in MM: the *Form of the Good* in *Republic* VI–VII. Plato assigns the Good a meta-status: through the Sun Analogy, the Good is said to "illuminate" intelligibility and, in a strong formulation, to be responsible for the being/essence of the other Forms. Even if one brackets the literal metaphysics, the functional core is clear: the Good is a *highest-order standard* that governs the intelligibility and correct orientation of inquiry and life.

In MM terms, the closest analogue is *PISC (Principle of Increased Self-Control)*. PISC is not merely one more domain standard among others. It is a global orienting postulate about the directionality of the universe's evolution: DS evolves toward increased capacity for self-

control (power to reach goals; capacity to transform state-space in wider ways). This makes PISC a natural candidate for what Plato's Good is doing functionally:

- In Plato: the Good is the supreme principle that orders and "illuminates" the intelligible.
- In MM: PISC is the supreme orienting postulate that organizes the evaluation of models and practices by their contribution to increased control, prediction, and effective intervention.

This does **not** mean that MM identifies Plato's Good with an ontological generator of being. The mapping is more disciplined: PISC functions as a *meta-standard* for how interuniversals should be evaluated and improved. For example, interuniversals that systematically enhance prediction, coordination, and error correction—thereby expanding the effective control of agents and collectives—are, in MM terms, aligned with PISC. In this way, the Good's "illumination" role is translated as a principled way of prioritizing which stabilizations matter and why: not because they mirror an external abstract object, but because they increase the system's capacity for reliable modeling and action.

This also explains why Plato ties the Good to education and governance (*Republic* VII): the "turning of the soul" is not mere conceptual change, but reorientation toward what most improves rational control over belief and practice. PISC provides MM with an explicit vocabulary for that orienting role, which ToF expresses more metaphorically.

6.5 What a realist enrichment would look like, and why the paper keeps it Type 3-only

It is important to be transparent about the road not taken. One can produce a realist overlay by introducing, for each predicate F, a mind-independent "target Form" that exists regardless of any modeling regime, and by treating correctness as correspondence to that target. One can also postulate privileged subsystems (gods, Demiurge) with perfect access to those targets.

MM can describe such a picture, but doing so would be a **Type 3** move: it conflicts with MM's model-centric discipline and its rejection of a God's-eye standpoint. The paper therefore quarantines this option as a Type 3-only enrichment for later discussion, rather than allowing it to seep into the baseline translation.

The philosophical payoff of maintaining the quarantine is methodological clarity: we can see exactly which Platonic commitments force realism, rather than drifting into it by ambiguity in the Form-term.

6.6 What this exercise contributes beyond Plato: a general comparative tool

The mapping is not only a reading of Plato. It also functions as a general method for comparative metaphysics: separate (i) *functional roles* (standards, explanation, correction, intelligibility) from (ii) *ontological packaging* (separate realm, atemporality, mind-

independence). MMToU provides a principled vocabulary for the functional roles—universals and interuniversals—while the Type 1/2/3 taxonomy tracks what must be added (and at what cost) to preserve stronger ontological packaging.

In this sense, Plato is an especially informative test case: ToF is one of the most influential attempts to secure objectivity by positing stable standards. Showing that those standards can be modeled bottom-up as interuniversals—while still isolating exactly where a realist reading would be forced—clarifies both ToF and MM.

6.7 Open questions carried forward

Even with the non-realist translation fixed, three substantive questions remain for the subsequent discussion sections of the paper:

1. *Which collectives stabilize which Forms?* Interuniversals are collective structures; Plato often speaks as if a Form is uniquely one. MMToU naturally predicts pluralism and multi-resolution stabilization; how far that pluralism can go while remaining faithful to Plato is a central interpretive question.
2. *How should we treat mathematical Forms?* Mathematics is Plato's paradigm of stable intelligibility (*Republic* VI–VII), and it is also where interuniversal stabilization can become extremely strong. The mapping suggests a particularly tight fit here, but the details matter.
3. *How exactly should PISC relate to the Good?* The present section motivates the functional alignment. Later sections can sharpen whether the Good→PISC translation is best presented as a direct identification, a close analogue, or a constrained reinterpretation (especially given Plato's "beyond being" rhetoric).

Section 7 will take up these questions under the conflict-resolution policy already stated: preferentially revise or reinterpret the ToF claims that force Type 3, and only in exceptional circumstances consider revisions to MM's basic principles.

7. Three focal problems: collectives, mathematics, and the Good

7.1 Which collective stabilizes Form(F)?

Under the fixed translation rule, *Form(F) = the interuniversal for F*, but an interuniversal is necessarily collective. Plato, by contrast, often writes as if a Form is simply *the* one standard—unitary, authoritative, and universal. If we are not careful, this gap can trigger a realist "solution" by stealth: one posits an agent-independent target Form to which different collectives merely approximate. The non-realist strategy is different: we keep Forms as interuniversals and ask how "universality" can be reconstructed as a property of *stabilization*, rather than as a property of a mind-independent object.

A first step is to separate three senses of "collective" that are often conflated in philosophical discussion but can be distinguished cleanly in MMToU terms. The same interuniversal can involve all three senses at once, but they play different explanatory roles.

(i) *Sociological collective.* This is the ordinary, empirical notion: the actual group of agents who participate in a practice at a given time—an engineering lab, a national standards institute, a craft community, a scientific discipline. These collectives plainly stabilize interuniversals through institutions, pedagogy, instruments, and enforcement mechanisms. However, taken by itself, the sociological collective is too parochial to match Plato's aspiration that Forms govern correctness universally.

(ii) *Competence-based collective*. This is not "who in fact participates," but the counterfactual set of agents who count as *competent users of F* under the best available stabilization procedures. This sense aligns with Plato's contrast between epistēmē (knowledge) and doxa (opinion) in the *Republic* and *Phaedo*. The authority of a Form is not that a group happens to agree; it is that correct application is constrained by standards that survive scrutiny, correction, and dialectical testing (*Republic* VI–VII). In MMToU vocabulary, the relevant collective for many Forms is therefore better understood as: the set of agents who can, in principle, be brought into robust coupling with the interuniversal by the appropriate pedagogical and corrective pathways. "Universality" here is not metaphysical; it is portability of convergence under correction.

(iii) *Idealized collective*. This is the limiting case of maximal stabilization: a regime in which the correction procedures are so tight that drift is negligible for the relevant purposes, making the standards appear "unchanging." Plato uses idealizations constantly (the purified intellect in the *Phaedo*, the philosopher-ruler and the best-ordered city in the *Republic*). Read non-realistically, this is not a commitment to an actually existing perfect knower; it is a way of expressing what maximal stabilization would look like.

These three senses become vivid in a single example.

Example (meter: sociological vs competence-based vs idealized). Consider the predicate *One meter*.

- On the *sociological* reading, the collective is something like the community organized around modern metrology: national standards institutes, calibration laboratories, instrument manufacturers, and the surrounding educational and regulatory infrastructure. This sociological network stabilizes the interuniversal by codifying definitions, building instruments, training technicians, and enforcing procedures.
- On the *competence-based* reading, the collective is broader and counterfactual: it is the set of agents who could be trained to use the relevant procedures correctly—agents who, given access to the right instruments and correction practices, would reliably converge on the same outcomes. A novice who estimates lengths by eye is

not excluded from the collective in this sense; they are precisely a case where coupling can be strengthened through training and calibration discipline.
- On the *idealized* reading, the "collective" is an ideal limit: a perfectly stabilized metrological regime in which definition, instrumentation, and correction eliminate drift for all relevant contexts. No actual practice achieves this perfectly, but the idealization is explanatory: it marks the direction in which stabilization procedures aim, and it helps explain why the standard functions as if it were invariant across time and persons.

This example also illustrates a point that matters for mapping Plato. Interuniversals are not simple monolithic objects; they are typically *hierarchical, complex structures* with multiple stabilized nodes corresponding to different sub-collectives and levels of competence. In MMToU terms, an interuniversal can be pictured as a non-physical DS-structure with a network of "concept-nodes" and "procedure-nodes," connected by pedagogical and institutional links. Some nodes are more local and practice-bound; others are more abstract and more tightly constrained.

Seen through the three senses of collective, the same hierarchical structure can be described in three complementary ways.

- *Sociological hierarchy.* Different institutions and sub-communities stabilize different nodes: a standards institute stabilizes high-authority definitions and calibration chains; a manufacturing community stabilizes tolerances and implementation procedures; an educational system stabilizes simplified teaching-level nodes. These nodes can coexist without contradiction because they occupy different roles in the overall practice.
- *Competence-based hierarchy.* The hierarchy corresponds to levels of mastery and correction power. Entry-level users operate with coarse nodes ("rough meter"), while competent practitioners operate with stricter nodes linked to calibration discipline. The interuniversal includes the pathways by which agents move upward: training protocols, error models, standard reference artifacts, and methods for resolving discrepancies.
- *Idealized hierarchy.* The hierarchy has a limit-point interpretation: as correction procedures are tightened and sources of drift are progressively controlled, the practice approaches an ideal regime in which the highest-authority node functions as if it were perfectly invariant. The idealization is not a new entity beyond the interuniversal; it is a way of describing the interuniversal's governing role under maximal stabilization.

This hierarchical picture is crucial for interpreting Plato without realism. Plato often writes as if there is *one* standard and as if error is simply distance from it. The MMToU translation reconstructs this "one standard" functionally: there can be a highest-authority node within an interuniversal, stabilized by the strongest correction mechanisms available, and other nodes can be judged relative to it within the same DS structure. Universality, on this account, is not secured by a mind-independent target Form; it is secured by the existence

of correction pathways that allow diverse agents and sub-collectives to converge—sometimes gradually, sometimes asymptotically—on a shared standard of application.

This also clarifies Plato's recurring theme that many people use predicates badly—mistaking shadows for realities (*Republic* VII), confusing images with originals, or operating at the level of doxa. On the MM translation, those are cases where agents possess universals that are coupled only to low-stability nodes, or where the interuniversal itself is fragmented and under-stabilized. Plato's educational program can then be read as a program of *relinking*: strengthening the corrective pathways that connect private universals to higher-authority nodes within the relevant interuniversals.

7.2 Why mathematics feels "closest" to Forms

Plato treats mathematics as a privileged waypoint in the ascent from sensibles to Forms—most explicitly in the Divided Line and Cave passages (*Republic* VI–VII), where mathematical reasoning is "higher" than ordinary perception because it answers to stable constraints, yet still works with diagrams and hypotheses rather than directly grasping first principles. On the present MMToU translation, that privilege is real—but it is not metaphysically exceptional. Mathematics is a particularly *tight* case of the same machinery described in Section 7.1: a hierarchical interuniversal with multiple nodes, multiple collectives, and unusually powerful correction pathways. What changes is not the ontology but the stabilization regime.

7.2.1 Mathematics through the three senses of collective

A mature mathematical interuniversal (say, Euclidean geometry) is best understood as a non-physical DS-structure composed of (i) definitions and primitive terms, (ii) inferential roles and proof norms, (iii) canonical construction procedures, and (iv) institutional and pedagogical mechanisms for transmitting and correcting those norms. Even in mathematics, the "collective" relevant to Form(F) is not one thing. It is a structured family of nodes seen through the same three lenses.

(i) *Sociological collective*. There is a concrete sociological network: teachers, textbook authors, universities, journals, seminar cultures, professional associations, and (in the background) the mathematical-physics communities that co-evolve many mathematical standards. The interuniversal here is visibly hierarchical: school geometry stabilizes one node (heuristics, diagram-based reasoning, standard exercises), while research geometry stabilizes another (axiomatic systems, proof assistants, category-theoretic reformulations, etc.). The point is not that one is "false" and the other "true," but that different sociological sub-collectives stabilize different nodes that are connected by pedagogical and methodological links.

(ii) *Competence-based collective*. This is the set of agents who can, in principle, be trained into stable alignment with the relevant proof and definition norms. A novice's "triangle"

universal is often a perceptual classifier; the mathematical interuniversal progressively forces reconfiguration of that universal into a role governed by definitions and proof constraints. The crucial feature is that mathematics supplies unusually explicit correction procedures: you can point to an invalid inference, repair it, and propagate the fix through a proof. This makes competence-based convergence far more robust than in many empirical domains.

(iii) *Idealized collective*. Mathematics also has a clear idealization: the limit in which proof discipline eliminates all gap, ambiguity, and drift—an ideal of *perfect rigor*. No actual sociological practice fully attains that limit, but the idealization is operationally present as a normative direction: it explains why mathematical standards can function as if they were "unchanging," even though they are maintained historically by institutions, training, and error correction.

Seen this way, mathematics does not bypass the complexities of interuniversals; it exhibits them with unusual clarity. The "Forms-like" feel of mathematical objects is the phenomenology of an especially strong stabilizing regime.

7.2.2 Historical origin as evidence: geometry as an evolving interuniversal

The following point is methodologically important: the history of geometry reads almost like a case study in interuniversal formation. The historical record suggests a pipeline that begins with practical spatial problem-solving, then moves through progressive idealization, and eventually reaches fully axiomatic treatment in which primitive terms are fixed by inferential role rather than pictorial meaning.

1. *Practical beginnings (surveying, construction, measurement)*. Early geometry appears as a tool: rules for areas, volumes, right angles, layouts.

   This is precisely what MMToU would predict: an interuniversal begins as a loose coordinative regime anchored in repeatable practices and shared constraints, not as an already-complete "object" waiting to be apprehended.

2. *Greek crystallization: ideal objects and deductive norms.* Euclid's opening "definitions" in the *Elements* are explicit idealizations—e.g., *point* as "that which has no part," *line* as "breadthless length"—which no physical mark or stroke literally instantiates.

   This is exactly the move from a practice-guided interuniversal to a more abstract node: the interuniversal is tightened by stripping away thickness, irregularity, and material constraint, and by embedding the resulting concepts in a deductive correction apparatus (proof).

3. *Modern axiomatics: primitives as roles in a structure.* By the late nineteenth century (Hilbert and successors), the trend "completes" in a striking way: *point*, *line*, *between*, *congruent*, and related terms are treated as primitives whose behavior is fixed by axioms; their "meaning" is whatever satisfies the system.

   The mature concept is thus not a refined picture, but a stabilized inferential role—what MMToU would call a high-authority node in the interuniversal.

This historical trajectory also clarifies a frequent philosophical temptation. One can read the same history *platonistically* ("geometry's success shows we track an abstract domain"), or *empiricistically* ("geometry is idealized from practice"), or *structurally/formalistically* ("geometry is about structures; 'point' names a place in a relational system").

The present paper's MMToU mapping is closest in spirit to the empiricist reading, but it adds a crucial MM-specific thesis: geometry concepts are not "free-floating"; they are stabilized as non-physical DS-structures by collectives, correction pathways, and institutional linkages.

7.2.3 Why Plato's "imperfect diagram / perfect object" contrast survives non-realistically

Plato's familiar example—no drawn circle or triangle is perfect, yet we can reason about circles and triangles—does not force a realist ontology on the MMToU translation. It forces a distinction between (i) *particulars* (physical drawings, utterances, gestures, inscriptions) and (ii) *the stabilizing interuniversal* that governs correct classification and inference. Euclid's point and line definitions already exhibit this: they are not descriptions of any sensible mark, but normative constraints that govern what counts as correct reasoning within the practice.

In other words, mathematics feels "closest to Forms" because it supplies: (a) unusually explicit standards of correctness, (b) unusually strong correction mechanisms, and (c) unusually stable transmission across time. That combination can make the governing node of the interuniversal appear "atemporal" and "unchanging," even though—historically and structurally—it is maintained by a complex, hierarchical, collective DS-process rather than by mind-independent abstract entities.

7.3 The Good as an orienting principle, and PISC

The most delicate question is the Good. In *Republic VI–VII*, the Good is presented not merely as another Form, but as a principle that "illuminates" intelligibility (the Sun Analogy) and organizes the ascent of knowledge (the Divided Line and the Cave). Even readers who resist literal metaphysics tend to agree that Plato is marking a *meta-level* role: the Good is what makes the standards themselves intelligible, authoritative, and worth pursuing.

Within the present translation, the first step is to preserve the discipline fixed in Section 4.1: *Form(Good) = the interuniversal for Good*. That interuniversal does not merely classify objects; it stabilizes evaluative norms—what counts as better reasoning, better ordering, better living, better governance. But Plato's text suggests more than a local ethical standard. The Good functions as a global orienting source: it governs what counts as improvement across domains, and it thereby shapes which standards deserve priority.

This is where PISC (Principle of Increased Self-Control) becomes central in MM. PISC is MM's highest-order orienting principle for evaluating the state of DS and (on MM's postulated picture) for understanding its long-run direction of evolution: DS tends toward *increased self-control*—expanded capacity to predict, coordinate, intervene, and reliably reach goals. On this view, "the ultimate self-control" is "good" in the relevant functional sense: it is the direction relative to which improvements are assessed.

Crucially, this does **not** mean that PISC "creates" Forms, or that it is a metaphysical source of being in a literal Platonic sense. Rather, PISC functions as a global *priority principle* over stabilization processes inside DS. It is what makes sense of the claim that some stabilizations matter more than others. Under the PISC lens, DS tends to generate, reinforce, and propagate those non-physical DS-structures—universals and interuniversals—that increase predictive and practical power. In that sense, PISC can be said to *facilitate* the emergence of Forms-as-interuniversals: not by manufacturing them *ex nihilo*, but by making their stabilization and persistence intelligible as part of DS's directional trajectory.

This supplies a clean, non-realist counterpart to Plato's illumination talk. The sun does not add objects to the world; it makes seeing possible and structures what counts as a better or worse visual grasp. Likewise, PISC does not add a second ontology; it supplies a principled orientation for why certain standards "light up" inquiry and practice: they expand the system's effective self-control. When an interuniversal improves prediction, coordination, and correction—whether in mathematics, measurement, craft, or governance—it does not merely become locally coherent; it becomes, by MM's evaluative criterion, more deeply aligned with the Good's functional role.

This also clarifies why Plato ties the Good to education and political order (again, *Republic* VII). The "turning of the soul" is not simply the acquisition of many correct beliefs. It is the reorganization of a learner's universals under higher-order constraints—constraints that determine what counts as a better method, a better reason, and a better form of life. In MM vocabulary, that reorganization is naturally described as increasing self-control through improved modeling and coordination. PISC, as a global orienting postulate, provides an explicit way to say what Plato expresses through metaphor: some standards are not merely standards *within* a domain; they govern how domains themselves are evaluated, integrated, and improved.

So, the proposed alignment is deliberately functional rather than ontological: the Good is treated as the interuniversal that stabilizes evaluative orientation, and PISC is treated as MM's explicit expression of the same "highest-order" role—an orienting principle that ranks stabilizations by their contribution to increased self-control. This preserves Plato's core ambition (a supreme principle that orders intelligibility and right orientation) while keeping the mapping non-realist and MMToU-faithful.

7.4 What remains open, without retreating to realism

These three focal problems show how a non-realist translation can preserve Plato's central ambitions without invoking mind-independent target Forms. The price is not metaphysical inflation but conceptual discipline: one must be explicit about (i) which sense of "collective" is in play, (ii) why some interuniversals become unusually stable (mathematics), and (iii) which meta-standard organizes evaluation (Good ↔ PISC).

At the same time, the translation leaves room for further work that is genuinely explanatory rather than merely interpretive. MMToU invites a more detailed theory of stabilization dynamics: how interuniversals form, fragment, and re-stabilize; how pedagogy and institutions change coupling strength; how pluralism and multi-resolution structures can coexist while still preserving a genuine notion of universality—i.e., correctness that is not reducible to "whatever some group happens to agree on"; and how such regimes interact with model-guided action under PISC. These are not afterthoughts; they are where MM's model-centric approach can plausibly outperform a purely ontological reading by offering a mechanism for how "Forms-like" authority can arise and persist inside DS.

Section 8 will use these clarifications to articulate the paper's broader implications for comparative metaphysics: how the Type 1/2/3 framework separates functional roles from ontological packaging, and how Plato can be read as a theory of stabilized standards even when one declines to reify a separate realm of beings.

8. Implications for comparative metaphysics

The exercise carried out in this paper is intentionally double-purpose. At the surface level, it offers a disciplined non-realist translation of Plato's ToF into the MM/MMToU vocabulary. At a deeper level, it exhibits a general method for doing comparative metaphysics without collapsing into either (i) uncritical historical paraphrase or (ii) wholesale assimilation of the older view into a contemporary ontology. The central claim of this section is that MMToU supplies a *role-based* framework—universals and interuniversals—that can preserve the functional insights of many metaphysical systems while making their optional ontological "packaging" explicit, negotiable, and classifiable.

8.1 Functional roles versus ontological packaging

A recurring failure mode in the history of metaphysics is to treat a theory's ontological idiom as inseparable from the function it serves. Plato's Forms are the canonical case: it is easy to move too quickly from "stable standards are required for knowledge" to "there exists a separate realm of mind-independent abstract entities." The present mapping argues that these steps can be separated.

On the MMToU translation, ToF's *functional roles* are preserved by interuniversals:

- explaining one-over-many (shared standards),
- grounding knowledge as stability and corrigibility (not mere opinion),
- structuring dialectic as a method of alignment and reconfiguration,
- showing that when Plato says a maker "looks to" a Form as a blueprint, this can be translated as *making and judging things by stable shared standards* (definitions, rules, procedures, and correction), not by consulting a separate realm of entities,
- avoiding the infinite regress by noting that a Form (in our translation, an interuniversal) is not another thing that is F in the same way particulars are; it is the standard that governs when and why particulars count as F.

What changes is the *ontological packaging*: instead of a separate intelligible realm of beings, we have non-physical DS-structures internal to DS, stabilized by collectives and correction pathways. The methodological lesson is general: many metaphysical systems can be reread as attempts to secure certain functional roles (objectivity, normativity, explanatory priority), and their apparent ontological commitments may be optional ways of encoding those roles rather than forced conclusions.

8.2 The Type 1/2/3 taxonomy as a comparative instrument

The paper's Type 1/2/3 framework becomes useful precisely at the boundary between role and packaging.

- *Type 1 (clean mapping)* captures the case where an older theory's functional roles can be expressed inside MM/MMToU without adding new postulates or violating MM's core stance (in particular, without introducing mind-independent target structures or privileged standpoints).
- *Type 2 (compatible enrichment)* covers cases where the mapping benefits from additional machinery—typically structural elaborations (hierarchies, stabilization gradients, learning dynamics)—but those additions remain consistent with MM's model-centric orientation.
- *Type 3 (conflicting enrichment)* isolates the point where the only way to preserve a claim *literally* is to import commitments that contradict MM's basic principles (notably, a God's-eye standpoint or mind-independent target entities). Type 3 is not

a mistake; it is a diagnostic. It tells us exactly what it would cost, in MM's terms, to accept a literal realist reading.

In Plato's case, the taxonomy makes the central methodological point transparent: the non-realist translation preserves much of the ToF functional architecture in Type 1, uses Type 2 mainly to articulate interuniversal complexity, and quarantines strong realist commitments as Type 3-only overlays rather than letting them seep into the baseline Form-term.

More generally, the same taxonomy can be applied to other systems. A metaphysical theory can be decomposed into (i) the functional work it is trying to do and (ii) the ontological idiom it uses to do it. The Type 1/2/3 classification then becomes a principled way to compare theories: not by asking which ontology is "true," but by asking which roles can be recovered under which minimal commitments, and what costs are incurred when a literal reading demands stronger metaphysical furniture.

8.3 Objectivity reconstructed: universality without realism

A further implication concerns a long-standing worry: if one refuses mind-independent universals, does one fall into relativism? The mapping provides a clear, testable answer: objectivity is reconstructed through interuniversal stabilization, not through correspondence to an external abstract object.

In MMToU terms, a predicate's "universality" is not the existence of a universal entity that many things share, but the existence of:

1. stable standards of correct application,
2. correction mechanisms that detect and repair error, and
3. portable convergence across agents under competence-building procedures.

This is why the earlier discussion emphasized the three senses of collective and interuniversal hierarchy. A practice can contain multiple nodes (different competence levels, sub-domains, institutions) while still preserving a genuine notion of universality—i.e., correctness that is not reducible to "whatever some group happens to agree on." Universality is the property of being governable by correction and convergence, not the property of mirroring an agent-independent Form.

For scientifically trained readers, the metrology example makes the point vivid: "one meter" is objective not because it names a metaphysical entity, but because the interuniversal contains definition, instrumentation, calibration chains, and error-correction protocols that enforce convergence and make disagreement tractable. Mathematics is an even tighter case, not because it escapes interuniversal complexity, but because it supplies unusually explicit correction norms.

8.4 The Good, PISC, and the structure of "highest-order" principles

The mapping's treatment of the Good suggests a broader lesson about "highest principles" in metaphysical systems. Classical metaphysics often posits a supreme principle that orders the rest (the Good, the One, God, Nature). In a model-centric framework like MM, such principles need not be read as metaphysical generators of being. They can be read as *global orientation principles* that rank stabilizations and coordinate evaluation across domains.

On the present translation, *Form(Good)* remains an interuniversal: the stabilizing regime for evaluative orientation. PISC then supplies MM's explicit expression of the same functional role: a postulate that evaluates and explains DS-evolution in terms of increasing self-control, and that thereby provides a principled way to say why certain stabilizations are privileged. This suggests a general strategy for comparative work: when older systems postulate a "highest principle," first ask *what evaluative or coordinating role it plays*; then determine whether MM can represent that role as an interuniversal plus a global orienting postulate, without importing a realist ontology.

8.5 A research program: from static metaphysics to stabilization dynamics

Finally, the mapping highlights where MM's approach can become more than a reinterpretation of Plato: it points to a research program in which metaphysical questions are reframed as questions about stabilization dynamics inside DS.

Plato's imagery—Cave, Line, Sun, ascent—can be understood as a theory of what happens when agents' universals become coupled to stronger interuniversals, and when those interuniversals are organized under a highest-order orienting principle. That is not merely a translation trick. It suggests concrete further questions that are empirically and formally tractable in principle:

- What mechanisms strengthen or weaken coupling between universals and interuniversals?
- How do interuniversals fragment, compete, merge, and re-stabilize?
- Under what conditions do multi-resolution structures produce productive pluralism versus incoherent relativism?
- How do global orientation principles (like PISC) shape the selection and persistence of interuniversals over long timescales?

If these questions can be made precise, then the "mapping" becomes a methodological proposal: treat classical metaphysical systems as compressed descriptions of stabilization phenomena and treat metaphysical progress as improved modeling of those phenomena rather than as accumulation of ontological commitments.

8.6 Summary

The central comparative implication is therefore methodological. MMToU provides a vocabulary—universals and interuniversals—for preserving the functional core of metaphysical systems while making their ontological packaging explicit and optional. The Type 1/2/3 taxonomy then provides a disciplined way to classify what a mapping costs and where it breaks. In Plato's case, this yields a reading that is non-realist yet preserves the key Platonic ambition: stable, authoritative standards that make knowledge and correct practice possible. In broader comparative metaphysics, it yields a general tool: separate role from packaging, reconstruct objectivity via stabilization, and treat "highest principles" as orienting constraints rather than as metaphysical generators—unless and until a Type 3 realist overlay is explicitly chosen.

9. Conclusion and outlook

This paper's central result is a *non-realist translation rule* and a *diagnostic classification* for what follows from it.

9.1 What the mapping delivers

Appendix A shows, item-by-item, that the core explanatory machinery of Plato's ToF can be translated into MM/MMToU by fixing the non-realist default: *Form(F) = the interuniversal for F* (Type 1 default).

With that fixed, the mapping preserves (in MM vocabulary) the main roles Plato assigns to Forms:

- *One-over-many:* many particulars are correctly classified as F because there exists a stabilized interuniversal regime for F (shared standards + correction pathways), not because they "share" a mind-independent abstract entity.
- *Participation / imitation:* "participation" becomes correct classification and constraint-governed realization under a stabilizing regime; "imitation" becomes imperfect instantiation relative to those standards.
- *Knowledge vs opinion:* the *Republic* and *Phaedo* contrast is captured as a difference in stabilization and corrigibility: epistēmē corresponds to robust coupling of an agent's universals to strong interuniversals; doxa corresponds to weakly stabilized, locally trained universals.
- *Dialectic and "turning of the soul":* dialectic becomes disciplined reconfiguration of universals under interuniversal constraints; the Cave/Line metaphors are recast as transitions from low-stability to high-stability modeling regimes.
- *Third Man pressure:* the *Parmenides* regress is blocked because a Form (as interuniversal) is not a peer instance of F; it is the governing standard that fixes correct application of F.

- *Mathematics:* geometry's "Forms-like" character is explained by unusually tight stabilization (explicit proof norms, correction procedures, strong transmission), and the historical evolution of geometric primitives reads naturally as interuniversal formation and tightening.
- *The Good:* Plato's Good (*Republic* VI–VII) is translated functionally via alignment with *PISC (Principle of Increased Self-Control):* PISC serves as MM's highest-order orienting principle that ranks stabilizations by their contribution to increased self-control, without treating the Good as a metaphysical generator of being.

9.2 Type classification of the overall mapping

Overall, the mapping presented in this paper is Type 2 (minimal): most items admit a Type 1 mapping under the fixed non-realist default, while Items 10–11 motivate limited Type 2 additions; Type 3 appears only as an optional overlay.

- *Type 1 (the mapping as presented):* If we treat ToF's central claims as claims about *stable, authoritative standards and their role in knowledge and correct practice*—rather than as literal ontology of a separate realm—then the translation into universals/interuniversals, coupling, and correction is cleanly MMToU-faithful.
- *Type 2 (minor, clarifying additions):* Where the translation benefits from extra structure, we add it compatibly—for example, hierarchical/multi-resolution interuniversals (nodes for different competence levels and sub-collectives), stabilization gradients, and learning-dynamics language (recollection as constraint phenomenology). These refine the mechanism without violating MM's basic stance.
- *Type 3 (only if one insists on a literal realist ToF):* If one insists that Forms are mind-independent, ungenerated, atemporal entities that exist and are what they are regardless of any modeling regime—and/or that some agents (Demiurge/gods) enjoy privileged, perfect access—then importing those claims *as literal metaphysical postulates* would require Type 3 departures from MM/MMToU. The paper intentionally quarantines that as a clearly labeled optional overlay rather than letting it enter the baseline Form-term.

9.3 High-Level Prose Translation of ToF into MM

The non-realist mapping of the Theory of Forms (ToF) into My Model (MM) developed in this paper addresses many distinct components of Plato's view. As a result, the exposition is necessarily detailed—and therefore lengthy. Readers who prefer a more compact and less technical overview, to help "see the forest for the trees," are referred to Appendix B, which provides a high-level prose translation of ToF into MM.

9.4 Outlook

The comparative payoff is methodological: MMToU provides a role-based vocabulary (universals, interuniversals, stabilization, coupling) that can preserve the functional core of classical metaphysical systems while making ontological "packaging" explicit and

classifiable via Type 1/2/3. In Plato's case, this yields a non-realist reconstruction that preserves his distinctive claim—stable, authoritative, universal standards that govern correct application and make knowledge possible—without committing MM to mind-independent Forms.

References

Khachatryan, A. (2023). My Model, a Metaphysical Framework. https://archive.org/details/my-model-2025-0523.

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Appendix A — 17-Item Mapping of Plato's Theory of Forms into MM/MMToU (Non-Realist Default)

A.0 Conventions used in this appendix

A.0.1 Base MM commitments assumed

This appendix assumes MM/MMToU as already defined, including:

- DS as the universal carrier (everything is in DS).
- TM and individual MM as modeling subsystems.
- MMToU's bottom-up machinery: particulars, agent-owned universals, and interuniversals; and properties as **relational classification facts** stabilized by interuniversals.

A.0.2 Standard definition used throughout (Type 1 default)

Form(F) = the interuniversal for F.

That is: **a stabilizing non-physical DS-structure** consisting of:

- aligned agent-owned universals for F, **plus**
- the linking resources that align/stabilize them (language, pedagogy, standards, instruments, institutions, etc.).

Note: At this stage, we leave open what exactly counts as "the collective" contributing to the interuniversal (humans only, broader conscious collectives, etc.). That question is deferred.

A.0.3 Mapping types

- **Type 1 (clean):** expressible using Base MM/MMToU only.
- **Type 2 (compatible extension):** requires new concepts/postulates compatible with MM's basic principles.
- **Type 3 (conflicting extension):** requires new concepts/postulates that conflict with MM's basic principles (especially No God's Eye / epistemic modesty / modeling-first stance).

A.0.4 Reserved note (do not use unless unavoidable)

Realist "target structure" Forms (Forms as mind-independent non-physical DS-structures that interuniversals track) are **reserved for Type 3 only** and are **not used anywhere in the Type-1 default mapping** in this appendix.

Item 1 — Forms as the most real, non-physical entities

ToF claim

Forms are non-physical, aspatial (not in space), and atemporal (not in time). They are unchanging, perfect, and the most real beings, in contrast to physical things, which are changing and less real.

MM mapping (Type 1 default)

- Plato's middle-dialogue claim that Forms "most truly are" because they are unchanging, perfect, and (in that sense) atemporal is treated here as a metaphysical ontology claim, not as a commitment MM must adopt or reject. MM brackets "degrees of reality" talk as outside its primary explanatory domain and proceeds by

mapping the functional role of Plato's stability contrast into MMToU terms (universals and interuniversals as stabilizing non-physical DS-structures).

- A Form(F) is the **interuniversal for F**, i.e., a **non-physical DS-structure** distributed across agents and stabilizing resources.
- "More real" is rendered as: **more stable and more role-defining for coordination, explanation, and long-range prediction** than any single particular or fleeting experience (a difference in stability/centrality, not a claim about an extra realm of entities).

Type analysis

- **Type 1:** succeeds (non-physical DS-structure + stability/centrality reading).
- **Type 2:** not needed.
- **Type 3:** not needed.

Conclusion

Item 1 = Type 1. No new postulates/concepts.

Item 2 — Forms as essences and answers to "What is X?"

ToF claim

A Form is what F-ness is; it answers "What is justice/beauty/etc.?"

MM mapping (Type 1 default)

- "Essence of F" is the stabilized content of the **interuniversal for F**: the shared constraints, paradigms, definitions, and inferential roles that govern correct application in a community (or other collective).
- "What is F?" becomes: "What does the interuniversal for F stabilize as the rule/role of F across contexts, and how do agents' universals converge to it under feedback?"

Type analysis

- **Type 1:** succeeds.
- **Type 2/3:** not needed.

Conclusion

Item 2 = Type 1. No new postulates/concepts.

Item 3 — Intelligible vs sensible: two ways of access

ToF claim

Intellect grasps Forms; senses grasp sensibles.

MM mapping (Type 1 default)

- "Sensible" corresponds to **particulars** encountered in experience (DS configurations as encountered/handled by agents).
- "Intelligible" corresponds to the **non-physical DS-structures** that stabilize meaning and classification—especially **interuniversals** and the agent-level universals aligned by them.
- Intellect vs sense becomes: different modes of modeling—(i) perception-bound, noise-sensitive modeling vs (ii) abstraction and cross-context stabilization via interuniversals.

Type analysis

- **Type 1:** succeeds.
- **Type 2/3:** not needed.

Conclusion

Item 3 = Type 1. No new postulates/concepts.

Item 4 — Participation: particulars are F by "participating in" Form(F)

ToF claim

x is F because x participates in Form(F).

MM mapping (Type 1 default)

- In MMToU, "x is F" is not an intrinsic tag; it is a **relational classification fact**: particular x (a DS configuration) + an agent's F-universal + a context stabilized by the F-interuniversal.
- So "participation" becomes: x is placed under F **within** the stabilizing influence of the interuniversal for F (language, training, exemplars, standards, instruments).

Type analysis

- **Type 1:** succeeds.
- **Type 2/3:** not needed.

Conclusion

Item 4 = Type 1. No new postulates/concepts.

Item 5 — Forms as perfect paradigms; sensibles as imperfect imitations

ToF claim

Forms are perfect; sensibles imitate them imperfectly.

MM mapping (Type 1 default)

- "Perfect paradigm" is rendered as the **idealized standards** embedded in the interuniversal for F (definitions, prototypes, norms of correctness).
- "Imperfect imitation" becomes: a particular fits those stabilized standards only approximately, or fits one node of a multi-resolution interuniversal but not another.

Type analysis

- **Type 1:** succeeds (perfection as idealization inside the interuniversal, not an agent-independent object).
- **Type 2/3:** not needed.

Conclusion

Item 5 = Type 1. No new postulates/concepts.

Item 6 — Degrees of reality: Forms "more real," sensibles "in flux"

ToF claim

Forms have fuller being; sensibles are becoming.

MM mapping (Type 1 default)

- "Fuller being" is translated as **greater stability and intersubjective robustness** of the interuniversal (and its central nodes) compared to the variability of particular cases.
- "Becoming" is translated as the continual change of particular DS configurations and local contexts.

Type analysis

- **Type 1:** succeeds.
- **Type 2/3:** not needed.

Conclusion

Item 6 = Type 1. No new postulates/concepts.

Item 7 — Knowledge targets Forms; opinion targets sensibles

ToF claim

Knowledge is of Forms; opinion is of sensibles.

MM mapping (Type 1 default)

- "Knowledge" corresponds to **high-stability, high-coherence, high-predictive-success** universals that are strongly supported by an interuniversal.
- "Opinion" corresponds to weakly stabilized, locally trained, or internally inconsistent universals (or contexts where the interuniversal is fragmented).

Type analysis

- **Type 1:** succeeds.
- **Type 2/3:** not needed.

Conclusion

Item 7 = Type 1. No new postulates/concepts.

Item 8 — Form of the Good as supreme principle

ToF claim

The Good is supreme; it grounds intelligibility and value.

MM mapping (Type 1 default)

- Form(Good) = the **interuniversal for "good"** (norms of evaluation, ideals, coordination targets).
- MM's PISC already supplies a global directional principle: the universe tends toward increased self-control/power (as defined in MM).
- Mapping move: the Good's "supremacy" is rendered as the role of the Good-interuniversal (and closely related interuniversals) in **organizing evaluation and goal-selection**, while PISC provides the broad metaphysical directionality that makes "increase of control" a privileged explanatory axis in MM.

Type analysis

- **Type 1:** succeeds if "supreme" is read as functional/normative primacy in evaluation + alignment with PISC (not as a mind-independent super-entity).
- **Type 2:** not needed under this reading.
- **Type 3:** would be needed only if we insist that the Good is a mind-independent non-physical DS-structure whose supremacy is objective in the strong realist sense (reserved; not adopted here).

Conclusion

Item 8 = Type 1 (under the non-realist default). No new postulates/concepts.

Item 9 — Relations and hierarchy among Forms

ToF claim

Forms relate to each other; there is intelligible structure (hierarchy, mixture, etc.).

MM mapping (Type 1 default)

- Interuniversals naturally form networks/hierarchies because:
  - concepts depend on other concepts,
  - practices and standards cross-reference,
  - institutions embed layered norms.
- This is "structure among Forms" translated as "structure among interuniversals and their nodes."

Type analysis

- **Type 1:** succeeds.
- **Type 2/3:** not needed.

Conclusion

Item 9 = Type 1. No new postulates/concepts.

Item 10 — Soul as akin to Forms: immortality and capacity to know them

ToF claim

The soul is immortal and capable of knowing Forms; embodiment interferes.

MM mapping (Type 1 default)

- "Soul" can be mapped minimally to an **agent subsystem of DS** with its own universals, capable of participating in interuniversals.
- However, literal **immortality / pre-existence** is not part of Base MM/MMToU.

Type analysis

- **Type 1:** fails if "immortal soul" is taken literally.
- **Type 2 (compatible extension):** introduce:

T2-P1 (Soul persistence): there exist person-like DS subsystems ("souls") that can persist across major changes in their physical carriers (including, in the strong form, across embodiment). Embodiment modulates noise/bandwidth/constraints in their modeling. This does not automatically violate No God's Eye; it is an ontological enrichment about what kinds of DS subsystems exist.

- **Type 3:** not required for this item.

Conclusion

Item 10 = Type 2, requiring **T2-P1 (Soul persistence).**

Item 11 — Recollection (anamnesis): learning as remembering

ToF claim

The soul knew Forms before birth; learning is recollection.

MM mapping (Type 1 default)

- Without pre-existence, MM can only translate "recollection" as: re-activation and refinement of pre-existing universals within a lifetime (prompted by experience and stabilized by interuniversals). That is weaker than Plato's literal story.

Type analysis

- **Type 1:** fails for the strict "pre-birth knowledge" claim.
- **Type 2:** succeeds by using **T2-P1 (Soul persistence)** plus a further compatible clause:

T2-P2 (Pre-embodiment modeling): prior to embodiment (or prior to the current embodied phase), the soul possessed universals that were later partially suppressed/occluded; sensory experience triggers partial recovery and re-alignment with the relevant interuniversals.

- **Type 3:** not required.

Conclusion

Item 11 = Type 2, requiring **T2-P2** (and **T2-P1** from Item 10).

Item 12 — Images (Sun, Line, Cave) and the "three beds" example

ToF claim

Plato uses images to show levels of knowledge/reality and imitation.

MM mapping (Type 1 default)

- These are pedagogical models of:
  - differences in stability between interuniversals vs shifting particulars,
  - differences between direct engagement with stabilized standards vs engagement with representations of representations.
- "Three beds" can be rendered as:
  - the interuniversal for "bed" (standards and meanings),
  - a crafted instance produced under those standards,
  - a depiction/tracing of that instance.

Type analysis

- **Type 1:** succeeds.
- **Type 2/3:** not needed.

Conclusion

Item 12 = Type 1. No new postulates/concepts.

Item 13 — Ethical/aesthetic Forms and practical significance

ToF claim

There are Forms like Justice and Beauty that matter for life and politics.

MM mapping (Type 1 default)

- Form(Justice) etc. = the relevant ethical interuniversals (norms, institutions, training, discourse, enforcement practices).
- Their practical importance is explained by their role in coordination and self-regulation, and by how they interact with agents' attempts to increase control in their environment (PISC directionality).

Type analysis

- **Type 1:** succeeds.
- **Type 2/3:** not needed.

Conclusion

Item 13 = Type 1. No new postulates/concepts.

Item 14 — Forms as causes: why things are F

ToF claim

Forms explain why sensibles are F ("beautiful because Beauty," etc.).

MM mapping (Type 1 default)

- "Because Form(F)" becomes: because the interuniversal for F stabilizes the criteria, inferential roles, and practical tests under which x is classified as F.
- This treats "cause" as **explanatory ground inside a modeling system**, not as a separate metaphysical force.

Type analysis

- **Type 1:** succeeds under the explanatory-ground reading (which is also the natural fit with MMToU's analysis of "x is F" as a stabilized relational classification fact).
- **Type 2:** not needed.
- **Type 3:** would be required only if we insist on strong realism: Forms as mind-independent causes of F-ness in sensibles (reserved; not adopted here).

Conclusion

Item 14 = Type 1 (under the non-realist default). No new postulates/concepts.

Item 15 — Forms as paradigms for craft and creation (Demiurge theme)

ToF claim

Craft uses Forms as paradigms; in some contexts the cosmos is ordered with reference to Forms.

MM mapping (Type 1 default)

- **Human craft:** direct fit. Craft relies on stabilized interuniversals (standards, templates, training) to produce particular instances.
- **Cosmic ordering:** in the non-realist default, we treat Demiurge language as a mythic/pedagogical image for DS-internal ordering tendencies (and, in MM, for whatever mechanism realizes PISC). MM explicitly treats the mechanism of PISC as unknown.

Type analysis

- **Type 1:** succeeds if we do not literalize a divine craftsman with privileged access.
- **Type 2:** not needed under this reading.
- **Type 3:** would be required only if we insist on a literal divine intellect ordering reality by consulting mind-independent Forms (reserved; not adopted here).

Conclusion

Item 15 = Type 1 (under the non-realist default). No new postulates/concepts.

Item 16 — Dialectic as ascent to Forms and the Good

ToF claim

Dialectic is the highest method for reaching Forms/Good.

MM mapping (Type 1 default)

Dialectic is translated as a process of:

- iterative refinement of an agent's universals,
- elimination of incoherence,
- pressure toward intersubjectively stabilized usage (interuniversals),
- improvement in predictive success and practical control (PISC-aligned modeling improvement).

Type analysis

- **Type 1:** succeeds.
- **Type 2/3:** not needed.

Conclusion

Item 16 = Type 1. No new postulates/concepts.

Item 17 — Plato's self-critique: participation, one–many, Third Man, and existence

ToF claim

Plato raises puzzles: participation, one–many, Third Man regress.

MM mapping (Type 1 default)

MMToU blocks the Third Man regress at its source by rejecting the presupposition that:

- properties are intrinsic tags that things possess in the same way, and
- universals are peer items that also "have" F in the same sense as particulars.

Instead:

- "x is F" is a relational classification fact stabilized by an interuniversal.
- Participation is handled as in Item 4 (classification under interuniversal stabilization).
- Existence is bracketed as being outside MM's primary explanatory focus.

Type analysis

- **Type 1:** succeeds.
- **Type 2/3:** not needed.

Conclusion

Item 17 = Type 1. No new postulates/concepts.

Appendix A.18 — Postulate/Concept Register (Union of Type 2/3 Additions)

Type 2 additions used in this revision

- **T2-P1 (Soul persistence):** person-like DS subsystems ("souls") can persist across major changes in their physical carriers (potentially including across embodiment).
- **T2-P2 (Pre-embodiment modeling):** the soul had universals prior to its current embodied phase; learning can include re-activation ("recollection") of these universals.

Type 3 reserved (explicitly not adopted here)

- **T3-Reserved (Realist Form target):** Forms as mind-independent non-physical DS-structures that interuniversals track. This remains reserved for later use only if unavoidable.

Appendix A.19 — Overall mapping type for ToF → MM (under this revision's non-realist default)

- Items **10–11** require Type 2 additions (soul persistence and pre-embodiment recollection) to preserve the literal ToF content.
- All other items admit a **Type 1** mapping under the consistent non-realist definition **Form(F) = interuniversal for F**.

Overall type (minimal, under this revision): Type 2.

Appendix B — High-Level Prose Translation of ToF into MM

Start with a familiar Platonic prompt. Draw a circle on paper. However careful your hand is, the drawn figure will be jagged under magnification; it will deviate from what geometry calls a circle. Yet you can still judge the drawing as "a circle," and you can also judge it as "not perfectly circular." Plato uses precisely this kind of gap—between unstable sensible instances and stable intelligible standards—to motivate the Theory of Forms (ToF), especially in the *Phaedo* and *Republic*. In the MM (My Model) translation adopted in this paper, we keep the gap, but we change what it is a gap *between*. It is a gap between two families of DS (Data System) phenomena: *particulars (objects, events, processes, and relations as encountered in experience and practice)* on the one hand, and *non-physical DS-structures of modeling* on the other—specifically, agent-owned universals and collective interuniversals as defined by MMToU (My Model's Theory of Universals).

Plato's two-realms imagery—the visible realm of becoming and the intelligible realm of being, dramatized by the Divided Line and the Cave (*Republic* VI–VII)—is therefore rendered as a distinction internal to DS. The "sensible" side corresponds to the shifting field of particulars: beds and tables, bodily states, political arrangements, episodes of action, and relational patterns that are tracked and revised in ordinary experience. The "intelligible" side corresponds to non-physical DS-structures that function as classifications, standards, inferential roles, and methods of correction. In MMToU terms, the basic building block of this "intelligible" side is the *universal*: an agent-owned classificatory non-physical DS-structure inside the agent's MM (My Model), used to group particulars under a predicate F (circle, bed, equal, just) for prediction, inference, and action.

But Plato's distinctive claim is not merely that individuals can form general concepts; it is that there are stable, authoritative and universal standards that govern correct application and make knowledge possible.

In the MM translation, that role is played by the *interuniversal*: a stabilizing non-physical DS-structure consisting of aligned agent-owned universals plus the linking resources (language, pedagogy, standards, instruments, institutions) that keep those universals aligned.

This is why the paper fixes a single non-realist meaning of the Form-term: *Form(F) = the interuniversal for F.* The Form of Circle, on this translation, is not a mind-independent perfect object "outside time," but the stabilized collective regime that makes "circle" a shared, correctable, and practically effective classification. One can see how this preserves Plato's functional point. The drawn figure is judged by reference to something that is not itself the drawn figure—namely, the stabilized standards embedded in the practice of geometry: definitions, proof techniques, constructions, error criteria, measurement methods, and the trained capacities of competent agents to apply and correct them. That entire stabilizing regime is precisely what MMToU calls an interuniversal.

It is “one over many” in a concrete operational sense: many agents’ private universals are coordinated so that the predicate F has a stable role across persons, contexts, and time.

With this fixed meaning in place, Plato’s central explanatory relation—participation (methexis)—is rendered as a particular kind of relational classification fact. To say that a particular is F “by participating in” Form(F) becomes: a particular DS configuration is classified under F by an agent’s universal in a context stabilized by the interuniversal for F. Participation is no longer a metaphysically mysterious tie between a sensible object and an abstract entity; it is the fact that classificatory behavior is constrained by a stabilizing collective regime. The same move translates Plato’s imitation language. Sensibles are “imperfect copies” not because they fall short of a mind-independent perfect entity, but because tokens and local performances are inevitably noisy realizations of a norm-governed practice. A drawn circle is imperfect in exactly the way an engineered part is imperfect relative to a specification: the specification is not a Platonic object hovering beyond space-time, but it is nevertheless a real, stable, non-physical DS-structure embedded in shared standards and correction procedures. The explanatory priority Plato assigns to Forms is then expressed as explanatory priority of stabilization: interuniversals explain why diverse cases count as F, why judgments converge, why correction is possible, and why “F-ness” is not merely a private projection.

This also clarifies how the ToF claim that Forms are causes (aitiai)—prominently in the *Phaedo*—is translated without realism. On the MMToU reading, Forms are causes in the sense that stabilized interuniversals are causal-explanatory resources within DS: they constrain behavior, guide production, and structure successful prediction and intervention. The Form of Bed in *Republic* X is not a supernatural object that makes beds exist; it is the stabilizing blueprint-regime (the interuniversal) that makes “bed-making” a coherent craft with criteria of correctness. A carpenter’s bed is intelligible as a bed because a practice exists in which “bed” has a stabilized role, and within which one can distinguish better and worse instances. When Plato adds the painter as “thrice removed,” the MM translation becomes almost literal in modern terms: a painted bed-image is a representation of an artifact, which itself is a realization under a specification. Each step increases the degrees of underconstraint: the image is not governed by the full set of functional standards that govern the artifact, and the artifact is governed by standards that exceed any single token. What Plato expresses as “degrees of reality,” MM renders as degrees of stabilization and constraint within a modeling regime.

At this point a sensitive issue arises. Plato often speaks as if Forms are “more real,” because they are unchanging and perfect, whereas sensibles are changing and defective—especially in the middle dialogues (*Phaedo*, *Republic*). MM does not adopt that metaphysical ontology claim as such. As developed in Section 5, MM brackets “most real being” talk as a metaphysical stance outside its primary explanatory domain, since MM’s domain is the evolution of DS via change and modeling. But the mapping does not discard Plato’s point; it relocates it. The relevant contrast is not literal atemporality versus temporality, but the difference between unstable tokens and stable standards.

Interuniversals are comparatively stable because they are maintained by correction mechanisms that outlast any particular instance. They are "unchanging" in the practical sense that matters for knowledge and explanation: the norms and inferential roles they stabilize are intended to be invariant across contexts and to persist through time even as tokens come and go. In other words, MM treats Plato's being-talk as a way of marking stability and explanatory priority inside a modeling regime, while refusing to treat it as a claim that commits us to an additional ontological realm.

Plato's epistemology then becomes legible in MMToU terms. The *Republic* and *Phaedo* contrast knowledge (epistēmē) with opinion (doxa): knowledge requires stable objects and therefore must be of Forms. In the MM translation, knowledge is not tied to a metaphysically separate object-type, but to the degree of stabilization of the relevant non-physical DS-structures. A belief is "mere opinion" when it is anchored only in local, unstable cues and lacks robust correction and generalization. A claim becomes knowledge-like when it is integrated into a stabilized interuniversal regime that supports reliable inference, counterfactual robustness, and correction under error. The Divided Line can then be read as a gradient of stabilization and model-power: from images and unstable appearances, through local physical regularities, to mathematical practices with stronger invariants, and finally to highly stabilized interuniversals that govern broad domains of classification and explanation.

The Cave (*Republic* VII) becomes a parable about regimes of model dependence. The prisoners' shadows correspond to impoverished, locally constrained universals that are insufficiently linked to stabilizing interuniversals: their classificatory apparatus is trained on a narrow, misleading slice of DS. Liberation is not a metaphysical departure to another world; it is a reconfiguration of universals under stronger interuniversal constraints—acquiring methods, standards, and inferential roles that let the agent correct earlier misclassifications. Plato describes this as the "turning of the soul." In MM terms, it is a practical reorientation of modeling: shifting from short-horizon patterning driven by immediate sensory salience to long-horizon stabilization driven by norms of explanation, proof, and correction.

Dialectic—the method Plato elevates in the *Republic*—is correspondingly translated as a disciplined procedure of universal revision under interuniversal constraints. Dialectic is not merely "talk"; it is a method for exposing contradictions, testing proposed definitions, and climbing toward more stable principles. In MMToU terms, it is a technique for aligning private universals with the interuniversal regimes that govern a domain, and for reorganizing the network of universals so that classification and inference become more coherent and powerful. This reading fits well with Plato's insistence that dialectic moves beyond assumptions: it is precisely what it means, in MM terms, to rebuild one's classificatory non-physical DS-structures so they no longer depend on parochial cues but on stabilized reasons.

The same approach yields a non-mystical but philosophically faithful translation of recollection (*anamnesis*) in the *Meno* and *Phaedo*. The MM translation does not presuppose the pre-existence of the soul as a literal metaphysical thesis (though it need not deny it); rather, it treats recollection (*anamnesis*) as a phenomenology of constraint. When an interuniversal regime is sufficiently strong—geometry in the slave-boy episode in the *Meno* is the canonical case—it can guide an agent toward correct judgments that outrun what the agent's immediate experience could obviously supply. In MMToU terms, the agent's universal for the relevant predicate is not "fed" new content by the senses; it is *pulled into alignment* by a stabilizing structure of standards, inferential roles, and correction procedures that the agent is brought into contact with through questioning, training, and exemplars. Where the coupling between an agent's universal and the governing interuniversal is strong—because the agent already has the right precursor concepts, because the pedagogical pathway is efficient, or because the interuniversal's constraints are especially crisp—the required reconfiguration can occur rapidly and with little explicit trial-and-error. This framework also offers a natural place to model individual differences in learning speed: differences in prior universal structure, in access to stabilizing resources, and in the strength and efficiency of the corrective pathways that connect the learner to the relevant interuniversal. From the first-person perspective, such constraint-driven correction can feel like "remembering": the sense is not of acquiring a novel datum from perception, but of having one's own thinking compelled into a determinate structure by reasons one can recognize once they are made salient. The key point preserved is that genuine learning is not the passive accumulation of impressions; it is the reorganization of an agent's universals under stabilizing constraints that are not locally generated by that agent alone.

Plato's cosmological blueprint imagery in the *Timaeus*—the Demiurge "looking to" Forms to order the cosmos—also becomes tractable under the same discipline. In the non-realist mapping, "looking to the Form" does not mean consulting a mind-independent entity; it means orienting production by a maximally stabilized blueprint-regime. The Demiurge functions as an idealized agent-like subsystem whose making is fully governed by the relevant standards. The narrative remains "top-down" in Plato's presentation, but the MM translation treats this as Plato's way of expressing the authority of the stabilizing regime: the cosmos is ordered as it is because ordering is guided by stable patterns of correctness, not by arbitrary preference. Where Plato's language suggests perfect grasp or metaphysical ultimacy, the mapping registers a pressure point that may require Type 2 or Type 3 moves; but the core functional role—blueprint-guided construction—is captured by the interuniversal concept without invoking realism.

The Form of the Good, in *Republic* VI–VII, then appears as a special case: a principle that is said to "illuminate" and ground the intelligibility and being of other Forms. In the baseline MM translation, the Good is treated first as an interuniversal—*Form(Good) = the interuniversal for Good*—whose distinctive role is to stabilize evaluation across domains: what counts as better reasoning, better ordering, better living, and better governance. Functionally, it behaves like a meta-stabilizer: it constrains not just object-level

classification (circle, bed) but the norms by which classifications and practices are assessed. This prepares, without yet forcing, the later comparison between Plato's Good and MM's PISC (Principle of Increased Self-Control), since both function as global orienting principles that organize subordinate standards. Whether that comparison can remain Type 1 or requires stronger postulates is part of the later results synthesis and conflict analysis. Finally, Plato's self-critique—especially the Third Man argument in the *Parmenides*—comes out as a diagnostic test for the mapping. The regress arises if a Form is treated as a peer object that itself possesses F in the same way particulars do, thereby requiring a higher Form to explain the shared F-ness. MMToU blocks the regress at its root by rejecting the presupposition that generates it: interuniversals are not "another instance" of F. They are stabilizing non-physical DS-structures that govern the correct application of F to particulars. They can be "about" F and can fix standards for F without themselves being F in the same intrinsic, token-level sense. Plato's later explorations of Being, Sameness, and Difference in the *Sophist* can then be read as pushing toward a more relational conception of intelligible structure—one that sits naturally with MM's general insistence that modeling, interaction, and relational capacity do more explanatory work than static ontological categories.

In short, the MM/MMToU translation keeps Plato's central insight—that intelligibility, correctness, and explanation require stable standards that outrun any particular instance—but relocates those standards from a separate ontological realm to stabilized non-physical DS-structures within DS itself. Forms become interuniversals; participation becomes stabilized classification; imitation becomes imperfect realization under norms; ascent becomes reconfiguration of universals under stronger constraints; and the famous Platonic images become vivid ways of tracking changes in stabilization, correction, and explanatory power across modeling regimes. This is the sense in which the mapping is non-realist yet still substantively "Platonist" about the role of stable standards in knowledge, craft, and the ordering of life.